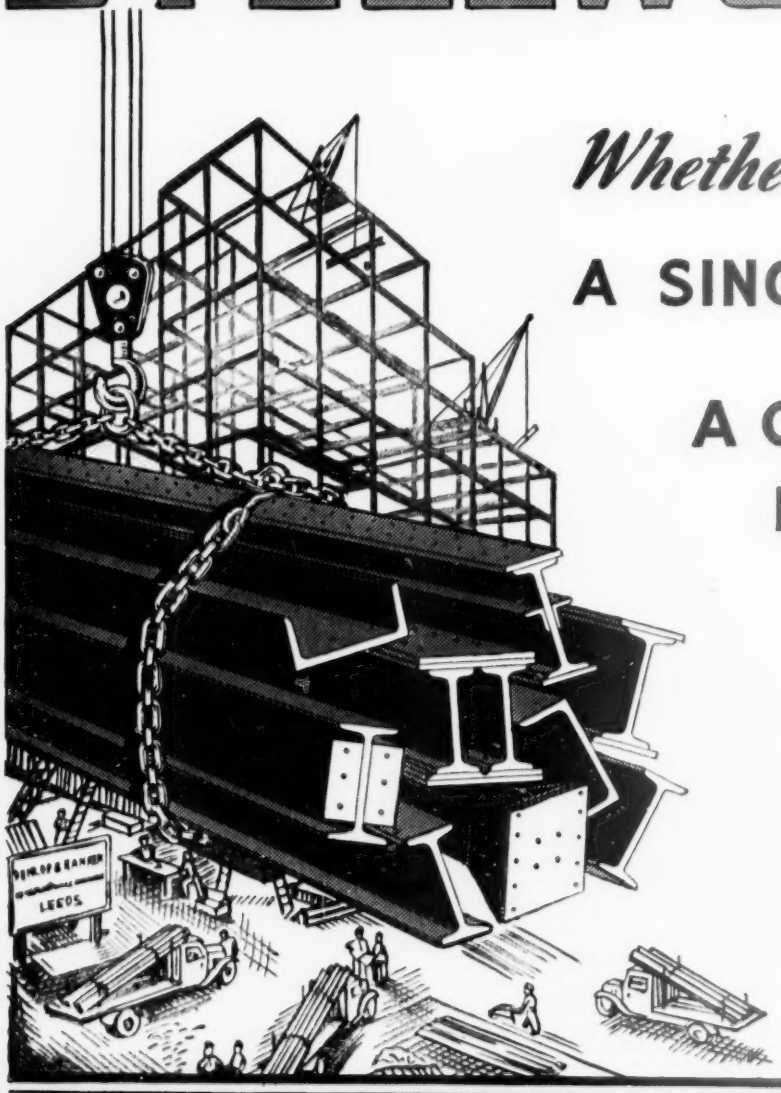
THE ARCHITECT & BUILDING NEWS

IN THIS ISSUE

JULY 2, 1953 · VOL. 204 · NO. 1 · ONE SHILLING WEEKLY

STEELWORK



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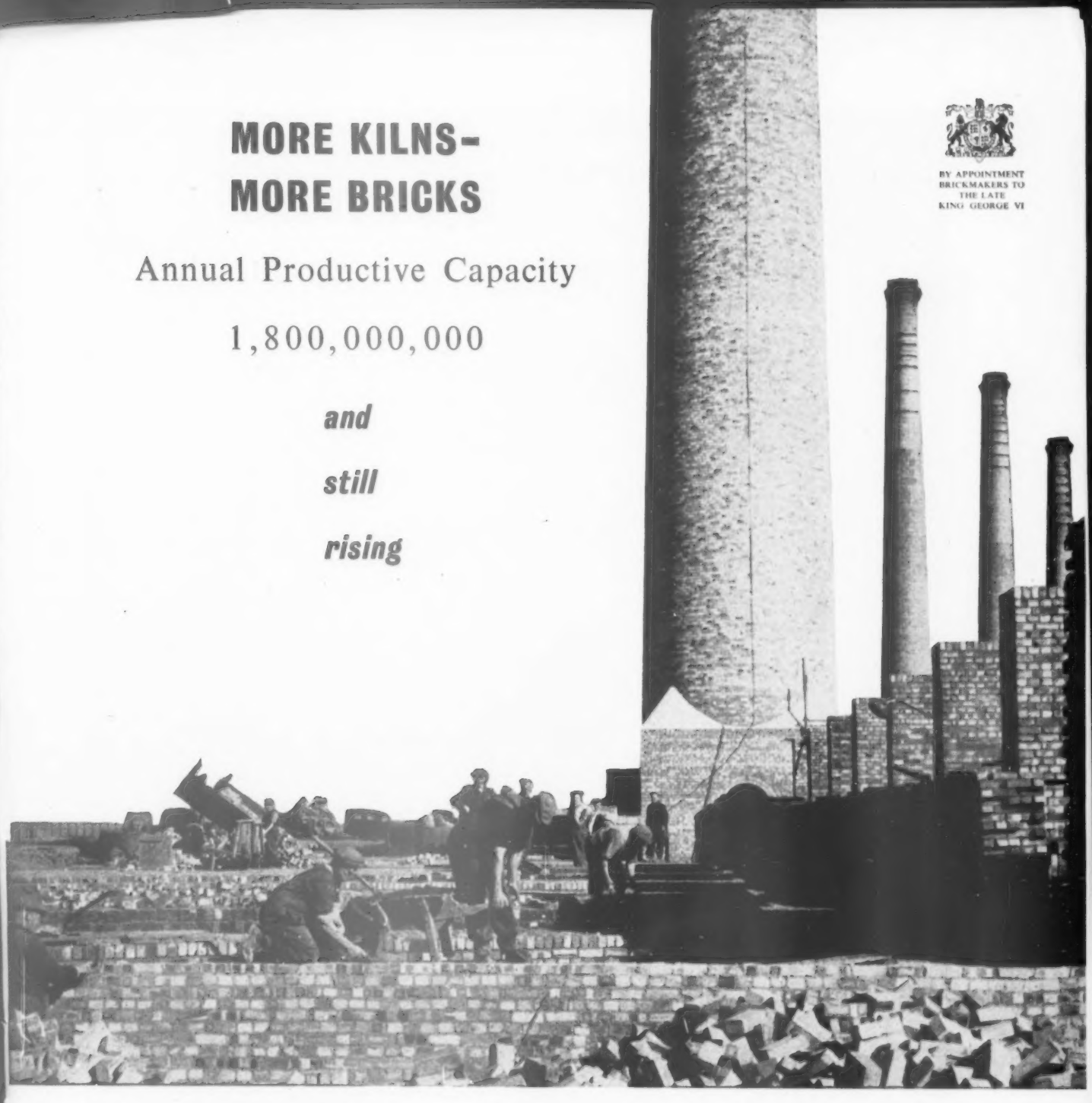

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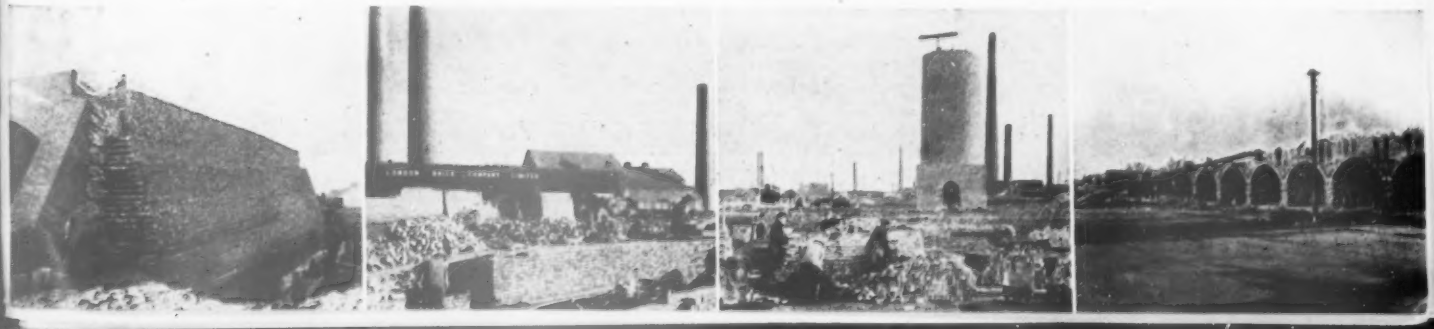

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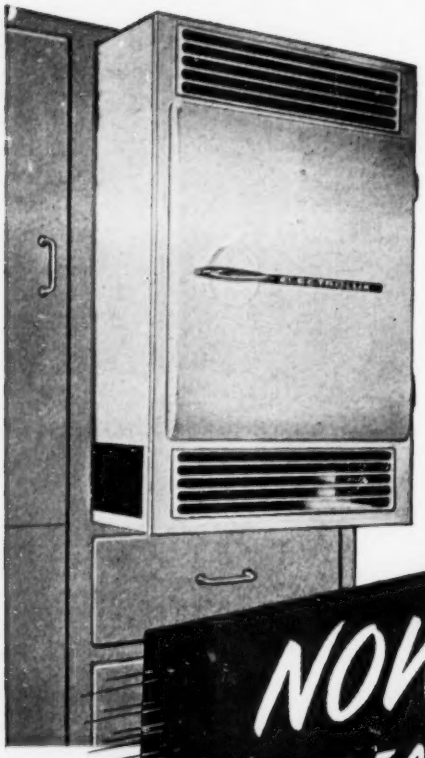

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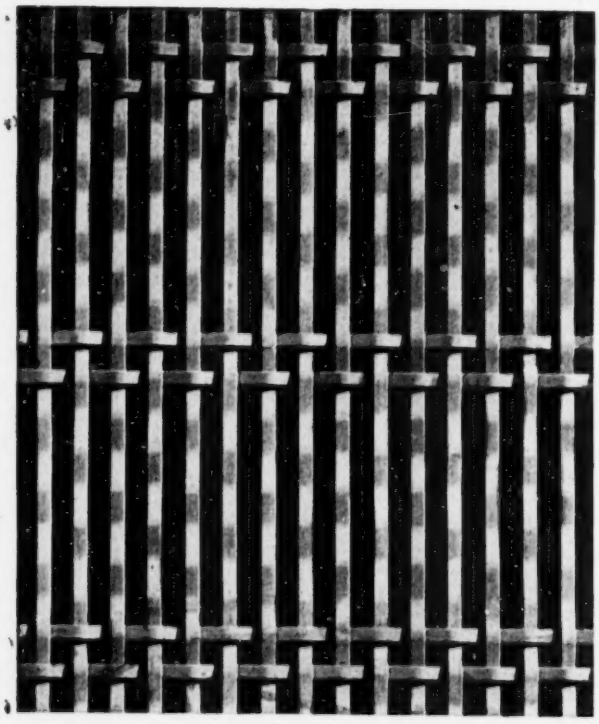

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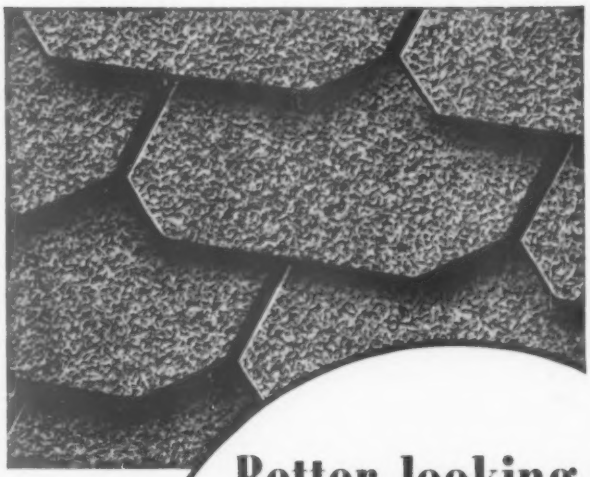

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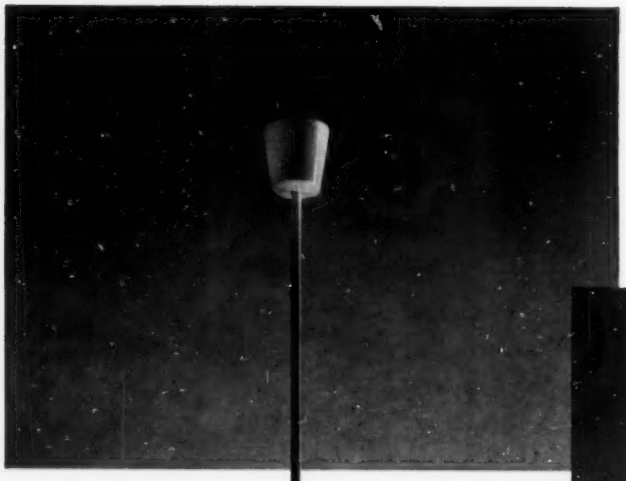

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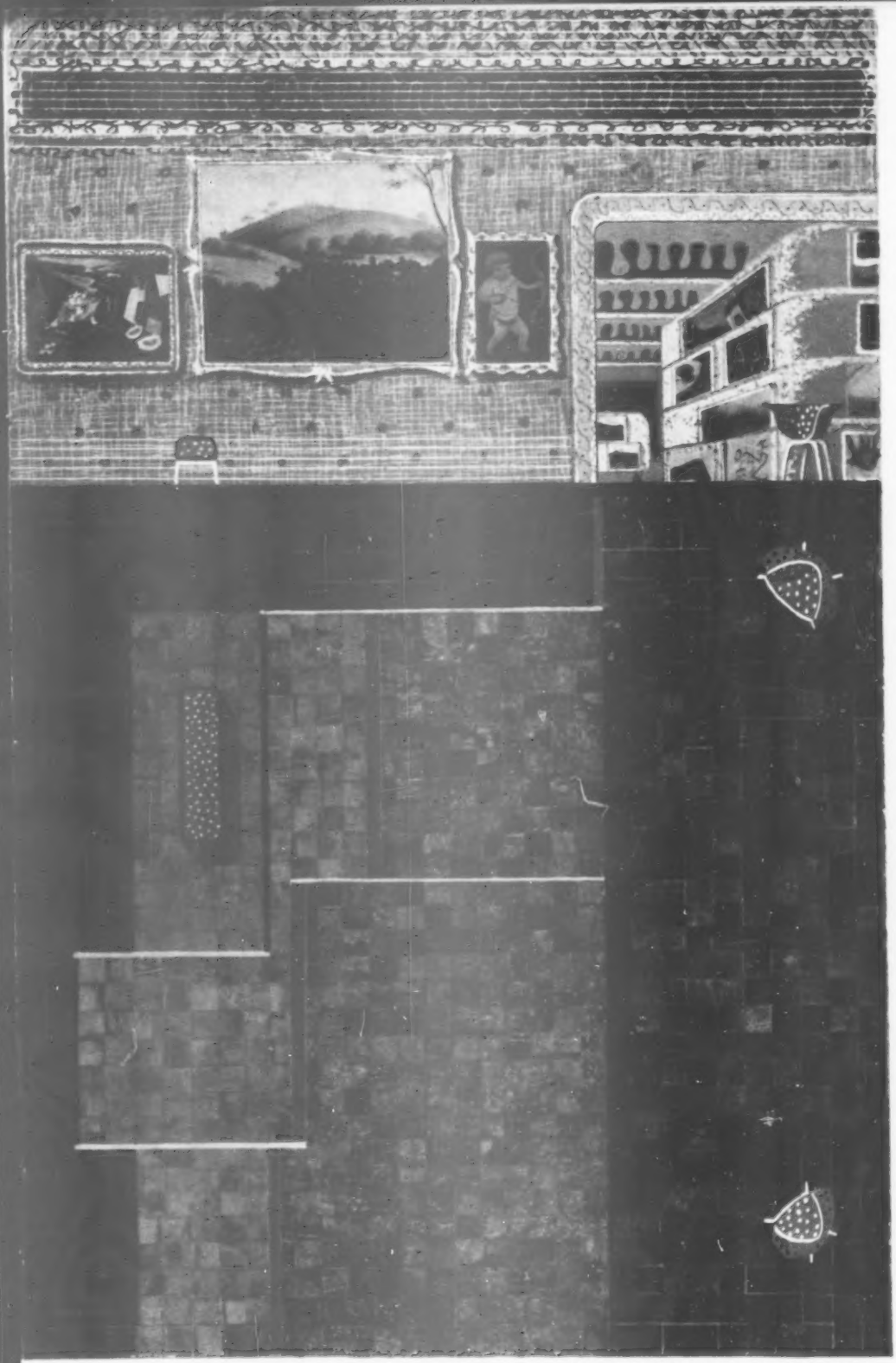
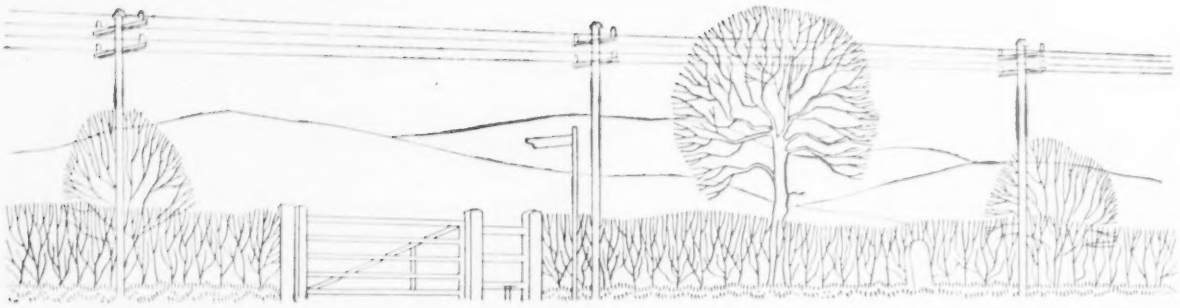


GALLERY OF PAINTINGS BY R. MYERSCOUGH WALKER

Applied Decoration

When self-coloured materials are employed in large areas such as obtains with a tiled floor, then that product puts a stamp on the whole interior design which cannot be ignored. Either the tiles must reflect the colour on the walls and furnishings or the furnishings must reflect the colour on the floor. On the whole, the floor is the largest area of colour to be observed and it is frequently an inherent part of the design long before the furnishings are chosen. The floor may even have to serve a number of successive occupiers each with their own ideas of interior decoration. The new Colortone range of Marleyflex tiles assumes that a designer (having chosen his floor colours) is faced with the subsequent choice of furnishings. For this reason the new colours have been designed so that two complementary colours are used leaving the designer free to choose any decorations within these complementary colours and any harmonies which are adjacent to them. These parent colours exist in the flashing of the tile floor and the basic colour of the tile is the mixture of these two complements. Thus, if the designer uses a dark green floor tile mixed from scarlet and blue-green parent colours, then the flashing of the tiles will indicate the kind of scarlet and blue-green used to obtain the neutral base and from these parent colours he can choose all the fittings that have to go with them regardless of the number of places from which he must acquire his fitments. It is comparatively simple for the designer to carry in his mind the fact that his choice must hover around the scarlet range or the blue-green range of colours; thus he has a system upon which to work and a system moreover which is within his training as a colourist. He is on familiar ground when dealing with parent colours and their derivatives and in making our new Colortone range of Marleyflex tiles from these parents, we have achieved an exciting set of neutrals which give a fine contrast to the brighter accents throughout the room.

This is the second of a series of announcements, six in all, describing a new system of colour co-ordination for flooring. Copies of the whole series will be available shortly.



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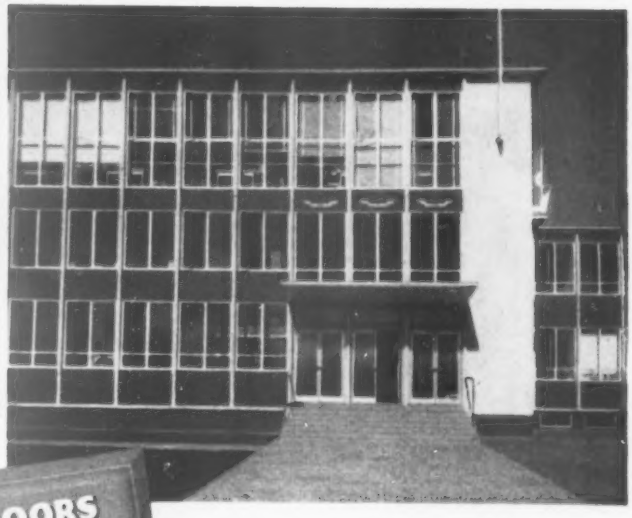

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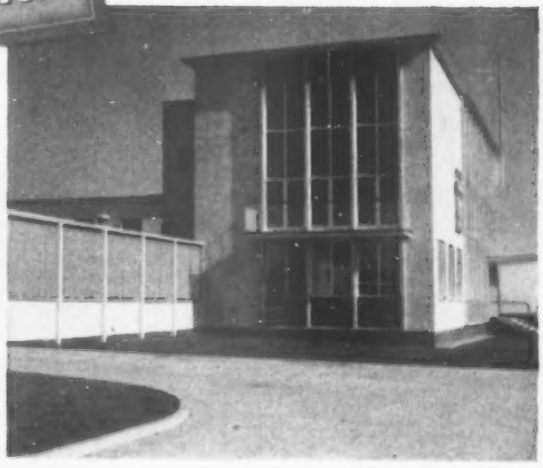

This firm has also recently supplied Bronze Windows, Mace Brackets, Locks and Special Ornamental Door Furniture for the House of Commons; Locks, Door Furniture and Floor Springs for the Free Trade Hall, Manchester; and Cloakroom Fittings for the Liverpool City Architect

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New Sherry Bar for the Bush

Photograph by courtesy of Messrs. F. & A. Berni Brothers of Bush Hotel (Swansea) Ltd

The new Sherry Bar in the Bush Hotel, Swansea, reconstructed by Gaskell & Chambers has a return on each end of the bar which increases the effective length from 19ft. to 27ft. The buttoned front, in wine coloured vynide, has a walnut bag shelf with "S" shaped wrought iron supports. The bar top is in maroon formica continued round to form the sideboard top of the backfitting, which has a central window flanked by two mirrors. Backfitting, soffit and shelves are supported by turned walnut pilasters.

Vol. 204 No. 1

THE ARCHITECT & BUILDING NEWS

July 2, 1953

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THE BUILDING INDUSTRY AND THE GOVERNMENT

LAST week at Skegness the Minister of Works, Sir David Eccles, addressed the Conference of the National Federation of Building Trades Operatives and he made a considered and balanced statement which, while not pandering to any sort of political soft-soap, gave an overall picture of the problems and difficulties that are besetting an industry which, besides being the largest in the country, is responsible for the greatest amount of capital expenditure. It was a sort of modern version of David in the lions' den; not perhaps a very truculent David nor were the lions very clawful or for that matter very purrful.

Sir David asked the very pertinent question, is the building industry a good one in which to invest labour or money or, alternatively, is it one into which to put our sons? He claimed that there was no reason to suppose that the post-war expansion of building would recede. The real yardstick was to be estimated first in the terms of need and then in terms of money and resources to meet the needs and the Minister emphasized also what is undoubtedly true, that the overwhelming majority of the electorate, whatever may be their politics, now wishes to see new buildings put up at a rate quite outside the capacity of the industry. He said:

"We should agree that to-day nine out of ten people in the country are deeply aware of the need for more social building such as houses, schools, hospitals, prisons and so on, and the same great majority of the community are also aware, as never before, that industry and agriculture must have more and more modern buildings and machines if our country is to earn a high standard of living in a competitive world.

"Before the war there was nothing like this general conviction that as a nation we ought to undertake almost limitless programmes of new construction. We may have had more capital in those days but the political parties were not then agreed, as they are to-day, on the national advantages of pressing to the limit the expansion of new building."

The Minister proceeded to examine the question of money and resources. Capital expenditure, which finances building, must, by and large, come from savings of all types; if the money does not come out of reserves it must come from rates and taxes which are moneys theoretically in excess of those necessary to maintain industry and social welfare. Sir David here said a very significant thing:

"I do not wish this afternoon to argue with you about the level of taxes, but simply to say this which I think should be agreed by everyone present: if any Government tried now to raise more money in taxes one result would be a lower level of individual and company savings. Indeed most economists would say that any increase in the rates and taxes from the present high level would injure rather than help to finance the expansion of buildings. Higher taxes would reduce private savings, and would make it more difficult for businesses to accumulate the cash out of which to pay for replacements and extensions."

It is very evident if this is true that the greatest factor for progress in the building industry must rest in costs and that these must be stabilized by output, both of labour and materials. Higher wages and greater cost of materials can be visualized and borne, always provided they carry with them increased output and time-saving attributes. With regard to the present tight supply of some basic products Sir David said:

". . . . we have not yet reached by a long way the point where the manpower in the industry is receiving the maximum supply of materials which it is capable of using. This is an immensely satisfactory conclusion because it proves that it is well within our

power to continue to expand without drawing further manpower into the industry."

And went on to say :—

" Now I can come to the question of costs in the building industry proper. And I must say once again that mounting costs are the only dangerous cloud in the horizon of the building industry ; where otherwise everything is set fair for a long time. The most certain and swift way to keep costs down is to increase the supply of building materials at constant or even reduced prices. No one connected with the industry would be likely to deny this. Secondly, costs can be cut by improving the management and organization of the industry. Thirdly, there are important contributions from the side of labour which can help to lower costs without lowering earnings . . . .

" Building is made up of hundreds of thousands of individual jobs, and I suspect that even if you consider each job by itself it is more difficult to organize a building site efficiently than some of the theorists, and also some of the great industrialists with their mass production techniques, are fond of telling us. Taking account of the peculiarities of each building site and the fancies of each building owner it cannot in my judgment be sound or sensible to try to run large sections of the industry through huge corporations.

" But if one rejects any kind of nationalization as inappropriate to building that does not mean that all is right with the present set-up, and that there is nothing to be done to improve it. Indeed there is a very great deal that wants doing, but not so much by Governments and Ministers—I assure you it is very easy for Ministers to overrate themselves—as by a combined operation of all those engaged in the industry, looking at their problems in the context of their class of work and their existing organization ...

" There is no single or simple way to achieve this increase in efficiency and earnings. Many teams and committees of enquiry have given us valuable recommendations. But always, to recommend on paper is one thing and to carry out the recommendation in practice is another. A man said to me the other day that we live in an age when nearly everyone knows better but does worse than his father : a sweeping statement but with a grain of truth in it. I am very anxious that the building industry itself should feel it a duty to examine and put into practice the admirable recommendations of all these committees. Quite a lot has been done. More could be done, and I like the method of joint consultation. I am sure that the industry, which is now on such a sound basis and has so much work in front of it, can manage its own affairs better than anyone else . . .

"This business of organization is primarily a task for management. And nothing is more important than training more men for positions of responsibility. I should like to see the builders and the operatives put their heads together more often on these problems of organization, and indeed on all problems concerning the expansion of the industry."

SCHOOLS VERSUS HOMES

THERE have been some interesting side-lights this week on the findings of the Select Committee on Estimates in its Report on Schools. The Settle (Yorks.) R.D.C. has been refused permission to accept a tender for twenty-two houses and four old people's dwellings at Hellifield for " reasons of policy " and because the Regional Office apparently considers the programme for this area to be an excessive expansion.

At the same time the West Riding Education Committee has had its next year's school-building programme cut by one-fifth by the Ministry of Education.

These may be attempts to obtain a new balance between housing and schools expenditure, but it is difficult to understand it as such ; nor is it very easy to reconcile such local anomalies with Sir David Eccles' wider national review made to the Skegness Conference.

EVENTS AND COMMENTS

THE HOLIDAY SEASON

It is a mystery how some people are able to boast that they have not had a holiday for twenty years and yet can still do their jobs efficiently and show no signs of wear and tear. Most of us think that we are grossly undersupplied with holidays, although opinions vary as to whether they should be taken as one long break or in a number of short, sharp bursts. Whatever the length of our allotted holiday we are, mercifully, just entering the period when, among other things, the almost overwhelming tide of committees recedes and stays out for a happy three months. Architects are very prone to busmen's holidays and quite apart from the large number, including students, who will be going privately on voyages of architectural exploration, there are also two conferences. First, C.I.A.M. 9, which is being held at Aix en Provence towards the end of this month, and then the U.I.A. Congress in Portugal in September. I hear that nearly thirty members of the M.A.R.S. group and students are attending C.I.A.M. 9. Most of them will be accommodated in the Ecole des Arts et Métiers. The Congress coincides with the Aix festival of music and opera. The theme of the Congress is to be " Our Way of Life," and present-day living needs will be examined in comparison with the type of dwelling being supplied in different countries. The M.A.R.S. group is submitting several schemes, including completed work, work in the project stage, and schemes by students. Among other things which I understand are likely to be discussed is the rejuvenation of C.I.A.M. by giving a greater share in its management to the younger men.

Photo : Guy Gravett

This picture, taken during a performance of Gluck's "Alceste" at Glyndebourne, shows the set designed by Sir Hugh Casson, his first venture into theatrical design. The set, although apparently severe, is successfully transformed by lighting into the gloom of Hades, with attendant shades, or into the atmosphere of a joyful and rejoicing court.

The U.I.A. congress is more official and more comprehensive, but not more serious. Delegates from all the world's official architectural bodies will be there. Committees will present reports, and the whole thing will be highly organized.

It is a pity that these two international organizations are not nearer together. There have in the past been joint meetings of members of both their councils but nothing much has come from their deliberations except a policy of live and let live, which is, perhaps, the most one can expect.

NEWS FROM ABROAD

The exhibition of Brazilian architecture, sponsored by the Anglo-Brazilian Society and the Cement and Concrete Association, is to be opened at the Building Centre on July 8th by H.E. the Brazilian Ambassador. This is, I believe, essentially the exhibition which nearly came to the R.I.B.A. some time ago. Having been allowed a small preview I can testify to the excellence of the photographs to be shown. The exhibition will remain open until July 31. Frank Yerbury, Director of the Building Centre, has just returned from a flying trip to Spain, where he made final arrangements for an exhibition of contemporary Spanish architecture to be held at the Centre in the autumn. Arriving back in the middle of our present heat wave he found it pleasantly cool after Madrid, where even the Spaniards are complaining.

Anthony Chitty and A. R. F. Anderson, both members of the R.I.B.A. Council, and both past presidents of the A.A., have just returned from Hong Kong, where they have been acting as external examiners to the School of Architecture. Mr. Chitty on behalf of the R.I.B.A. and Mr. Anderson for the University of Hong Kong. I know nothing of their official duties, of course, but they seem to have had a wonderful time. Professor Gordon Brown is reported to be in great form and to be putting up buildings at high speed. While they were away the only news that had filtered through was that they had been burgled in the Raffles Hotel in Singapore, by an amateur cracksman, too, who was more or less caught in the act. It took three hours with service and civil police before their property was returned to them. They were royally entertained by the Hong Kong students at, in or on, a floating restaurant at a place called Aberdeen. As a direct result at least one Scots song was sung by Mr. Anderson and the pair were presented with inscribed chop-sticks for themselves and their wives. On the way home the travellers visited the great temple of Angkor Vat, in Indo-China, which Mr. Anderson described to me as being beautiful beyond all expectation. Their journey took them to many strange places; at Macao, for instance, they called on the Governor to obtain permission to go into the interior. The Governor leapt from his bath to grant it. They swam in the South China sea and came back from Calcutta in a day. They both agreed that the Comet flies too fast,

or too slowly, for the stops are more noticeable than the flying time. But that, I understand, is another story.

THE "NEWS CHRONICLE" HOUSE

The competition is over and the lucky winners have chosen Miss Judith Ledeboer's house. I hope it does not mean that that is the last we shall hear of it. It would be most interesting to know for example the final cost of the house.

The *News Chronicle* is to publish a book illustrating a number of schemes and readers, and presumably others, may buy sets of drawings and specifications. Since the R.I.B.A. has been closely associated with this competition it would be interesting to know how the architects concerned are to be remunerated. Readers will remember that some months ago I described what appeared to be an excellent system of providing drawings and specifications of architect-designed houses organized by an Australian newspaper and the Royal Victorian Institute of Architects.

CANTERBURY CATHEDRAL

Delegates to the recent British Architects Conference may like to know that a small and excellently illustrated book on Canterbury Cathedral has just been published by *Country Life*. The text, by Hugh Ross Williamson, is slight but informative and the really first-class photographs were taken by A. W. Kerr. It costs 12s 6d and as a pictorial record of the great building it is first class.

OFFICIAL ARCHITECTURE AND PLANNING

This is to be the new title of the paper that you and I have known since 1937 as the *Official Architect and Planning Review*. The proprietors and their advisory committee have decided that the new title is more appropriate since the field which the paper now covers is so very much wider than it was then. The Journal was founded to help the official architect to gain recognition and there is no doubt that it played an important part in so doing. Relations between official and private architects are now better than they have ever been and a large number of first-class men are working as official architects. The change of name is a wise one and we all hope that the new coat will prove comfortable and wear well.

BREATHER FOR ABNER

For the next three weeks I shall be away on what I choose to think is a well-earned holiday. During that time this page will appear as usual but unsigned.

ABNER

NEWS OF THE WEEK

R.I.B.A. Council Election Result

PRESIDENT.

Mr. Howard Robertson, M.C., A.R.A., S.A.D.G., unopposed.

PAST PRESIDENTS.

Mr. Andrew Graham Henderson, R.S.A. (Glasgow), unopposed; Sir Percy Edward Thomas, O.B.E., LL.D., D.L., J.P., M.T.P.I. (Cardiff), unopposed.

MEMBERS OF COUNCIL

Elected.

Mr. Charles Herbert Aslin, C.B.E. (Hertford), 1,928 votes; Professor Sir William Graham Holford, M.A., M.T.P.I., 1,854 votes; Dr. John Leslie Martin, M.A. (Tring), 1,518 votes; Mr. Ralph Tubbs, O.B.E., 1,509 votes; Mr. Alwyn Cwilym Sheppard Fidler, M.A., B.ARCH., A.M.T.P.I. (Birmingham), 1,317 votes; Mr. Roderick Eustace Enthoven, 1,068 votes.

Not Elected.

Mr. Denis Clarke-Hall; Mr. Harold Conolly (Chelmsford); Professor Gordon Stephenson, B.ARCH., M.C.P., M.T.P.I. (Liverpool); Mr. Thomas Cecil Howitt, D.S.O., O.B.E. (Nottingham); Dr. Ronald Bradbury, B.A., M.SC., A.M.T.P.I. (Liverpool); Mr. Sidney Harold Loweth, F.S.A. (Maidstone); Professor Joseph Stanley Allen, B.ARCH., M.T.P.I. (Newcastle upon Tyne); Mr. Howard Vicars Lobb, C.B.E.; Mr. Stanley Wayman Milburn, M.B.E., M.C., T.D. (Sunderland); Mr. Victor Bain (Leeds); Mr. George Fairweather; Lieut-Colonel Eric Cole (Cirencester); Lieut-Colonel Henry Philip L. Cart de Lafontaine, O.B.E., T.D., P.P.T.P.I.; Mr. Fred Allard Charles Maunder (Aylesbury); Mr. Edmund Douglass Jefferiss Mathews, O.B.E., A.R.I.C.S.; Mr. John Holliday Haughan (Carlisle); Mr. Donald Hanks McMorran; Mr. Norval Rowallan Paxton, M.C. (Leeds); Mr. Alexander Robert Fordyce Anderson; Mr. Thomas Eugene North, O.B.E.; Mr. Eric Alfred Lyons (East Molesey); Mr. Walter William Fisk; Mr. Tom William Haird (Leicester); Mr. Arthur Bailey, O.B.E.; Mr. David Cynddylan Hughes Jenkin, B.A. (ARCH.), A.M.T.P.I.

ASSOCIATE MEMBERS of Council.

Elected.

Professor Robert Hogg Matthew, C.B.E. (Humbie, East Lothian), 2,169 votes; Mr. Peter Faulkner Shepheard, B.ARCH., A.M.T.P.I., 2,155 votes; Mr. George Grenfell Baines, A.M.T.P.I. (Preston), 1,751 votes; Mr. Percy Edwin Alan Johnson-Marshall, A.M.T.P.I., 1,582 votes; Mr. Richard Alfred Hardwick Livett, O.B.E. (Leeds), 1,398 votes.

Not Elected.

Mr. William Alexander Allen, B.ARCH. (Garston, Watford); Mr. Sidney Edward Thomas Cusdin, O.B.E.; Mr. Michael Arthur James Farey, M.A.; Mr. Herbert John Whitfield Lewis; Mr. Philip Roy Middleton (Nunthorpe, near Middlesbrough); Mr. Charles H. Pike; Mr. Harold Bruce Allsopp, B.ARCH. (Stocksfield, Northumberland); Mr. Anthony Drew Edwards (Leicester); Mr. Leonard Rowland Stedman (Farnham); Mr. John Stephen Lacey, A.M.T.P.I.; Mr. Hamish Edgar Donald Adamson.

LICENTIATE Member of Council.

Elected.

Mr. Bernard Hugh Cox, F.R.I.C.S., 1,004 votes.

Not Elected.

Mr. Sidney Lunn Whitehouse (Birmingham); Mr. Charles Oliver (Hull); Mr. Allan William Vincent (Harwich); Mr. Lionel Frederick Vanstone (Plymouth); Mr. Dudley Watkin Joel (Croydon).

President Town Planning Institute

Sir William Holford, M.A., B.Arch., M.T.P.I., F.R.I.B.A., has been elected President of the Town Planning Institute for 1953-54, and will take office in November next on the expiration of the term of office of Mr. S. L. G. Beaufoy, C.B.E.

Electrical Apprentices Award

The first scholarships given by the Apprenticeship and Training Council for the Electrical Contracting Industry have been awarded this year.

The scholarships, tenable for three years, for degree courses at a University or for Higher National Diploma Courses at a Technical College, and covering fees, examination expenses and maintenance allowances, have been won by: David Arthur Cole, of Dagenham, Essex, a student at Poplar Technical College, and Brian Horace Walter, of Otham, near Maidstone, a student at Maidstone Technical College.

CHANGE OF ADDRESS

S. N. Cooke and Partners, Chartered Architects, Sun Building, Bennett's Hill, Birmingham, 2, have changed their address to: 34, Harborne Road, Edgbaston, Birmingham, 15. Tel.: Edgbaston 1151-4.

C O R R E S P O N D E N C E

R.I.B.A. Conference

To the Editor of A. & B. N.

Sir,—May I refer to the letter you publish in this week's issue of your journal from Mr. C. S. F. Witts, from which I gather that he considers that Local Government architects have such little regard for the expenditure of public money that they lightly make an error of £13,000,000 with reference to the school building programme.

If Mr. Witts would be good enough to read the two Papers a little more carefully he would discover that Mr. Johnson Marshall's £40,000,000 is the annual expenditure on new schools, whereas the £53,000,000 which I quote is the amount of the annual capital expenditure arising out of the 1944 Education Act. The difference of £13,000,000 is spent on buildings such as Colleges for Further Education, Training Colleges, and extensions to existing buildings.

With regard to the last point Mr. Witts makes, he is just as badly adrift here as with his statement on finance. We know that a gentleman named Ictinus was the architect of the Parthenon on the Acropolis at Athens amongst other buildings of that period, and we are also aware that Mnesicles designed the Propylæa. This is certainly a long time before the early 15th century when Mr. Witts thinks that architects were invented. It is quite certain that no buildings of the quality of those mentioned could have been erected without an architect, and it is equally certain that though in the Middle Ages buildings were erected by groups of craftsmen, they could not have operated with the success they did without an over-riding control.

Allow me to end with my congratulations, added to those of others, on the first-rate production of the Conference issue of your journal.

I am, etc.,
C. H. ASLIN,
Hertfordshire County Architect.

The Private Practitioner

To the Editor of A. & B. N.

Sir,—The Coronation has been heralded on all sides as the advent of a new Elizabethan era, rich in promise, enterprise and prosperity and for which the stage is set or is it?

As far as the Building Industry is concerned the position of the professional man *inter alia* is worthy of review within such limits as space will permit.

The most significant feature is the gradual elimination and eventual disappearance of the private practitioner, and this refers to the architect, surveyor and engineer, and not any one of them in particular. For some time past and latterly in increasing momentum as advertisements in the professional Press testify, the State has abrogated to itself a vast building programme, recruiting great numbers of professional men within its official ambit and restricted the work of the remainder by licence. Students completing their training, do so in the hope that they may retain that British spirit of independence, freedom, adventure and creative enterprise which was so significant a feature of the first Elizabethan age.

Disparaging criticism, undue complaint or comparison, serves no purpose whatever. The facts and trends speak for themselves. The natural corollary to this absorption into State service is that in due course and not very long either, any present practice of, or search for Registration, especially on a wrongful unilateral basis, becomes unnecessary and redundant since the professional man in official service is automatically protected. He has no concern with the incursions of the unqualified, the Scale of Charges or for that matter any Code of Professional Practice. Beyond utilizing any professional body for the purpose of qualifying examination, he need not even remain a member if indeed enrol as such. The qualifying examinations are only necessary for grading for salary if that, and that province is served and protected by N.A.L.G.O. It is improbable that any Government or Municipal Authority would tolerate any external disciplinary provisions.

The State has every advantage in this direction since it can offer and provide security, steady emolument, promotion prospects and superannuation and in these uncertain days this cannot fail to be a considerable attraction. If it stopped here, it would be sufficient but the creative and functional urge in man cannot be stifled and mere security is no anodyne for the craving soul.

Even avoiding criticism of any kind, one is impelled to question whether this ideology and activity does not tend to stultify any prospect of repetition of the first Elizabethan spirit. Security surely is the reward of toil and sweat and not the prerequisite. Granted at the outset, the risk is incurred of intellectual and mental laziness tending to negative creative effort or incentive of any real spiritual and inspiring consequence. On the other hand those who prefer freedom have not thought it of much consequence otherwise they would have been less inarticulate and fought to greater purpose for its preservation and the right to equivalent and alternative existence.

However effective work in the official sphere may be, deliberate supersession of private practice with its recognized spur of fresh ideas, untrammelled creative incentive cannot fail to produce a lapse into the moribund, from which recovery would be difficult. This fact is realized already and many heroic efforts under very great difficulties are being made in many quarters to effect co-operation. Overwhelming odds, however, militate against any wholesale method in this direction. Not only is private practice stifled by licence restrictions and professional inhibitions but it is also faced with hopeless overlapping of function between one profession and another all factors due to failure on the part of the various organizations in collective and statesmanlike conference to put the house in order.

In a purely domestic affair such as this Parliament has neither time nor inclination to undertake this work for them, hence a solution must be found if possible within existing legislation if private expression is to survive as survive it must as a potential and enlivening communal asset available to State and the public in proper proportionate measure.

Without any further comment on a position which is so well known the following suggestion is offered for the consideration of your readers. They are invited to purchase a copy of the Defence Regulations 1939 Emergency Powers (Defence) Statutory Rules and Orders 1939, No. 927 (Stationery Office 2s). With a pencil to underline in Regulation No. 56 Section 1 the following: "any public utility undertaking" and "or maintaining supplies and *services essential to the life of the community*," and on Page 44 "or other instrument determining their functions," also Part V Page 56 Sections 87, 88 and 90.

1. Through the medium of the above existing legislation to extend the present licence grant system to establish personnel in the best interests of public and professional protection and policy. To invite the co-operation and assistance of H.M. Government and if necessary to petition for such extension by Order in Council.

2. That all persons of the respective professions in the Building Industry who have been established in full-time practice privately as Principals for a period of x years shall receive and be deemed entitled to receive, a licence to practice by the State. By the term private practice and private practictioner, shall mean in the main, those persons who are remunerated solely by fee in accordance with custom, and in accordance with a Scale of Professional Charges. The grant of State licence shall not apply to persons holding salaried appointments, or who are employed by any authority in receipt of Treasury grant or public funds.

3. The State licence with its bestowed privilege and responsibility to be granted to individuals only, and not to firms or partnerships. A State Licence may be granted to a corporate or chartered professional body in respect of its total membership to be utilized under special conditions only. For example a winner of a professional competition who cannot qualify under Clause 2 may have the temporary use of the corporate licence.

4. *No other qualification* except proof by sworn affidavit of established practice for the period of x years minimum shall be required, and the grant of licence cannot be withheld for any other reason.

5. The application for State Licence to practice, shall be made to Licensing Boards set up regionally by the appropriate Ministry, such Boards to consist of Officers of the Ministry as part of its permanent administration irrespective of party and to have at least two and not more than three delegates elected annually by ballot by and from each representative body in equal number (A.R.C.U.K. excepted), such professional body shall have been in existence for a number of years. Powers to grant State Licences shall be vested in the Boards themselves, and not to administrative staffs, which last shall only serve in this matter in an advisory capacity.

6. Each profession shall, through its representative body or bodies at the direction of the Minister within x months from the date of Order in Council, lay down under precise headings, the functions in respect of which the State Licence shall be deemed to apply and be relevant, and the form of licence shall be framed for each appropriate section and nature of function.

7. Any State licence would be subject to revocation by or surrender to the Licensing Boards in respect of bankruptcy on the part of the Licensee, his retirement

from practice, acceptance of salaried employment, death or by petition. Under no circumstances would the licence be transferable except under provisions of Clause 3. It may be revocable on petition, either on the representation of any relevant professional body, or a stated number of practitioners on grounds to be specified. The usual right of appeal shall apply through Tribunal or even the High Court.

8. The applicant for State Licence shall be expected to pay an appropriate fee for such grant to the Treasury in respect of the x number of years, establishment in practice and/or shall pay an annual retention fee for duration.

9. All drawings and contract documents of any kind prepared by the Licensee shall bear the Licence number thereon and public authority shall be empowered in the public interest to request the requisite imprint on drawings, etc., submitted for statutory approval in respect of which drawings, etc., the Licensee shall be held personally responsible both by private client and public authority. Should the Licensee permit the use of such imprint to persons not so licensed, his legal responsibility under grant can neither cease nor be transferred in respect thereof.

10. Any person using a fictitious licence number or permitting such use, or using such number for a function not specified thereon in the Licence document, failing to produce proof of Licence grant when required, shall be liable to prosecution, revocation of all licences of which he stands possessed together with appropriate fine.

This scheme, however incomplete and imperfect it may be, offers a solution for the private practitioner. It does not aim to restrict entry to the professions, neither would it have that result. It does not interfere with the present examination systems which endow the applicant to a greater benefit of licence if and when he obtains it.

The only other alternative is some form of complete nationalization of the industry wherein possibly both official and private practitioners can work to less unfair and disproportionate advantage and which is regretted by both.

I am, etc.,

NIEL MARTIN-KAYE, F.R.I.B.A.

COMING EVENTS

Municipal College, Southend-on-Sea

July 3 to July 9. Exhibition of the work of the Department of Architecture, Surveying and Building, to be held in the Main Hall of the Municipal College, Victoria Circus, Southend-on-Sea.

London Master Builders' Association

July 8 at 2 p.m. General Meeting of Area No. 1. At this meeting there will be a short film show, presented by the Yorkshire Copper Works, Ltd., dealing with the use and installation of copper tubes and fittings. At Derry and Tom's Restaurant, Kensington High Street, W.8.

CORRECTION

On page 754, issue June 25, Structures.—Frames, fig. 5 relates to fig. 3; neither relate to fig. 2 which is a separate structural system.

IN PARLIAMENT

New Towns Survey

The political father of the new towns, Lord Silkin, invited the House of Lords on June 24 to examine the progress that had been made; an unusual instance, as one of his fellow-peers described it, of an ex-Minister calling attention to what he did when he was a Minister.

Lord Silkin covered a larger canvas than the terms of his motion prescribed, for that only called attention to the recently published reports of the new towns development corporations for the year ended March 31, 1952, and he discussed the affairs of the new towns in general and at the present time. It was intended, he said, that the 14 new towns should ultimately house a population of 600,000. When the reports were published the development corporations had erected a total of 12,000 houses. In the time originally contemplated, 15 years from the creation of the new towns, most of them, he believed, would have been substantially completed.

So far the results had been somewhat mixed. Inevitably greater consideration had been given to housing than to social and recreational facilities, and there was a considerable shortage of buildings for carrying on these activities. If the restrictions on this work could be relaxed, and the development corporations allowed to build *pari passu* the social buildings required, the new towns would develop much more satisfactorily. In many cases, too, the new towns were desperately short of schools.

The keystone to the success of the new towns was the provision of the necessary amount and kind of industry. In some cases—he instanced Crawley and Hemel Hempstead—industrial requirements were being reasonably well met; but in others—the heavy industry town of Corby, and the mining towns of Peterlee and Glenrinnes—more industry and a greater diversification was necessary to give the requisite balance. These new towns constituted a great national project, for which the Government were responsible, but he had formed the impression that the different Departments were looking at them from the departmental point of view. The Board of Trade was refusing certificates, the Ministry of Works was refusing building licences, and the Ministry of Transport was not always helpful. The proposal to build a new international airport at Gatwick might be necessary, but it would have serious repercussions on Crawley, to which many industrialists had gone in the belief that they were going to a quiet country town, away from the hustle and bustle of London, and that their businesses would thereby benefit. He hoped there would be a full enquiry into this aspect of a matter which seemed to be looked at purely from the point of view of civil aviation. Agriculture was another case in point. New towns could not be built without using land, but the Ministry of Agriculture was fighting a "last ditch" battle over every acre. He hoped that this internecine strife would end, and that all Departments would work together.

It was unfortunate that ever since the passing of the New Towns Act costs had been rising. The country was committed initially to an expenditure of something like £250 millions. It might be asked whether in present circumstances it was advisible to go on with the full project. The only alternative that had been seriously put forward was to build high flats in congested towns. On the present subsidy basis it would cost the country very much more to build high flats than to carry on with building new towns. It had been calculated that it would cost from £10 millions to £15 millions more to build 10,000 high flats in London than to build 10,000 dwellings in the new towns. From a financial point of view it was definitely more economical to build houses in new towns than to build flats in existing congested areas.

Passing from finance to design, he said the purpose of building the new towns by means of development corporations was to get interested and concerned with their erection people who would have ideas of their own, each trying out the things they thought most desirable, and thereby avoiding the awful monotony of 14 new towns all designed by one Government Department and all bearing the stamp of the Ministry of Housing and Local Government. In the county of London large numbers of flats had been built in the Georgian style, each excellent in design; but 100 or 200 "excellencies" all bearing the stamp of the L.C.C. became monotonous and tiresome. Moreover, one regarded these new towns as laboratories. In the next 50 years there was bound to be an immense amount of redevelopment of existing towns, many of which were hopelessly out of date. There was a great deal to learn about the way the development should take place. The new towns could serve a useful purpose in enabling research and development to be carried out on a relatively small scale—possibly even to make some mistakes, but at any rate to avoid making the same mistakes all the time. If that was accepted as the case for the development corporations, his criticism was that they had not been allowed their heads as much as they ought to have been. In some cases officials in London had felt that their own conception was better than that of other people, and too often their ideas had been imposed on the development corporations—not always by direct means. The corporations should be given as much scope and freedom as possible. It was not easy to strike the balance between freedom and the ultimate responsibility of the Minister to

Parliament, but with wisdom and tolerance it could be reasonably drawn.

He regretted the announcement that it was not intended to start any more new towns. Manchester, Leeds, Glasgow, Birmingham, Liverpool, and many other large towns, were incapable of providing accommodation for the people inside their areas. They had to go outside, and the construction of new towns or the extension of existing towns was the only satisfactory way.

Against these criticisms he set some successes. New ideas had been produced, and could be seen in operation. In Stevenage, Harlow and Crawley there were pedestrian shopping centres where traffic was not allowed, where people could shop in safety and often under cover. There were new ideas on housing layout, and it could be seen what "12 to the acre" meant. There had been many excellent ideas for cutting down cost. Many types of new buildings had been put up—improvised schools and technical colleges, and so on. People were coming from all over the world to see what was being done in the new towns—indeed, they were becoming important dollar earners.

This exhaustive survey was amplified in specific respects in other speeches. Viscount Hudson, for example, spoke of the too frequent selection of good agricultural land for town development, and wanted the powers of the Ministry of Agriculture increased rather than diminished. He also saw a frightful waste of land and money when schools were put in a central position instead of on a corner, and instanced the additional cost incurred in this way at Crawley. Lord Macdonald of Gwaenysgor brought from South Wales a complaint that the quality of the houses being built by the development corporation at Cwmbran was less satisfactory than those erected "before the rural council came into existence in 1894." And there were others.

The debate was answered by Lord Mancroft, a Lord-in-Waiting. The Government, he said, felt neither complacent not apologetic about what had been achieved. They did not suggest that there had not been mistakes and missed opportunities, but they said firmly that a great deal also had been achieved. The progress report he gave was that up to the end of last month over 12,000 houses had been built and nearly 9,000 were under construction. Just over 200 shops had been built or were building. One church had been completed and nine were under construction. Seventeen community centres and halls, and eight "pubs" had been completed or were being built. Over 2,500,000 sq ft of factory space, and nearly 10,000 sq ft of offices, had been provided. That surely was sufficient answer to the criticism (made in *The Times*) that most of the new towns differed little from housing estates. There was more justice in the criticism that there was not sufficient variety of industry in some of the new towns. The strict economic tests governing the issue of building licences had tended of necessity to produce this result. There was ground for believing, however, that in the not-too-distant future it would be possible to redress the balance.

It was perhaps true that none of the new towns had got very far with its main town centre, but it would be surprising if it were otherwise. The construction of a town centre at any time could scarcely proceed as appreciably as housing and factory construction. But proposals had been received, and in many cases a start had been made. In Hemel Hempstead, Corby, Welwyn, Crawley, Harlow and Peterlee, the site works had begun, and in three of them the buildings were going up. The Government and corporations agreed that low density planning would involve a great waste of land and unnecessary expense. The corporations were working to densities which compared favourably with modern urban development. Broadly speaking, the aim was a density of at least 13 houses to the acre, and in many current proposals this figure was being exceeded. Twelve houses to the acre would hardly produce a garden suburb.

Not all the new towns would require additional industry under the ægis of the corporation. With regard to the others, up to the end of last month just over 1,125,000 sq ft of factory space, occupied by 56 firms, had been completed, and another 1,300,000 sq ft, to be occupied by 28 firms, was under construction. The Government were doing everything possible to increase the appeal for industry to go to the new towns. The Minister had been giving personal attention for some time to the question of community buildings, and arrangements had been concluded by which licences for substantially more expenditure, of the order of £1,150,000, in the next 18 months, would be allocated to churches, church halls and other community buildings in new housing projects, including the new towns. The new towns offered a wonderful opportunity to planners and architects, and he joined in deploring any possibility of a standard type of "new town architecture." He hoped that when they settled down the new towns would give some encouragement to sculptors and painters to come and beautify them, and maybe after the example of the old towns like Ravenna and Bruges and Norwich and Winchester, become patrons of the arts.

He could hold out no hope whatever of any further new towns being considered, and urged that for the time being they should concentrate on trying to make the existing towns work well. The Government were whole-heartedly behind the scheme, and if there was internecine strife between Departments —which he did not admit—what Lord Silkin had said should be sufficient to correct it.

National Plywood

The national stock of plywood, excluding strategic reserves, amounted to approximately 220 million sq ft at the end of May. The Minister of Materials stated that as far as could be foreseen disposal of it should be completed in the course of next year. (June 22.)

Softwood Assessment

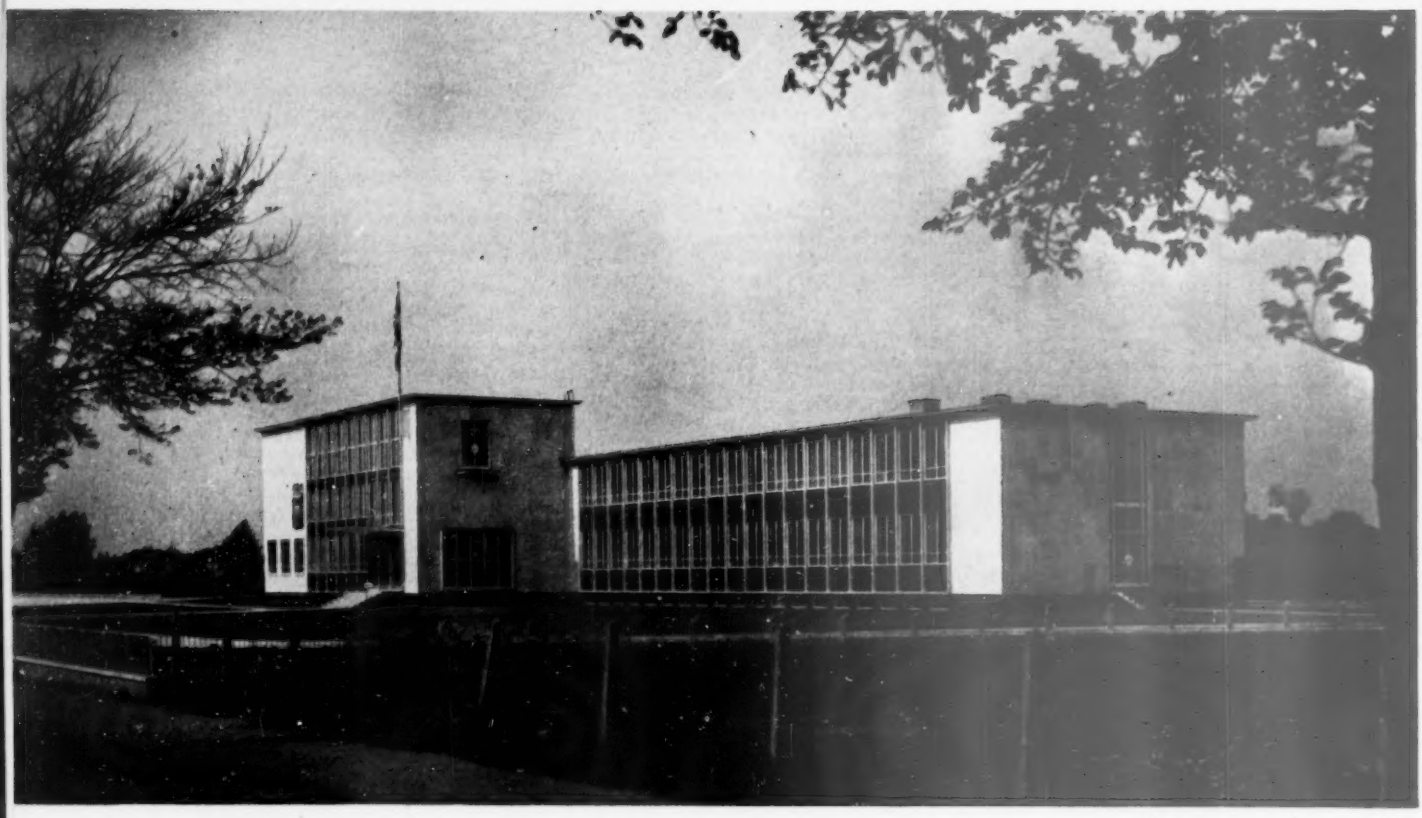
The Minister of Materials was invited by Mr. Hurd to announce further relaxation in the use of softwood for particular purposes where economy in construction costs would result. Sir Arthur Salter replied that he hoped to receive within a few weeks the results of the reassessment undertaken in April of the possible increase in softwood consumption, and the reduction in the use of other materials that might follow the abolition of licensing. When the report was received the possibility of easing controls over softwood for building and construction would be examined at once. He could not give any advance assurance of immediate or substantial relaxation, because it was possible that the new assessment might show that a large increase in consumption of softwood was likely, with a correspondingly serious effect on the balance of payments. (June 22.)

Belgian Cement

Mr. Peter Freeman asked the Minister of Works, in view of the fact that British cement was in short supply and Belgian cement was available, cheaper and of equal quality, to what extent Government contracts specified that this cement should be used in place of British. Sir David Eccles replied that Belgian cement was dearer than British cement. Nevertheless, supplies of cement from Belgium had been obtained by the British cement industry and sold in this country at the same prices as were charged for British cement. In some Government contracts British cement was specified. The Ministry of Works contracts did not specify the country of origin, but the cement must comply with B.S.12. Belgian cement which attained this standard was therefore acceptable to my Department. (June 22.)

Granite in London

The Minister of Works was asked by Mr. Hayman, who represents Falmouth and Camborne, what success had attended his efforts to secure the use of granite, where suitable, for reconstruction work in London. He stated that the consultative committee for the stone industry had urged the greater use of natural stone, and within the limits of building resources the Ministry had licensed work which specified this material. The particular type of stone must be left to the designer. Mr. Hayman asked if the Minister would accede to any request for a licence for the use of granite, because of the severe depression in the granite industry. Sir David Eccles said he must look at each request on its merits, but his information was that all stonemasons in the country, except one per cent, were employed. (June 23.)



The entrance front from the Wolverhampton, Birmingham Road

G.K.N. GROUP RESEARCH LABORATORY

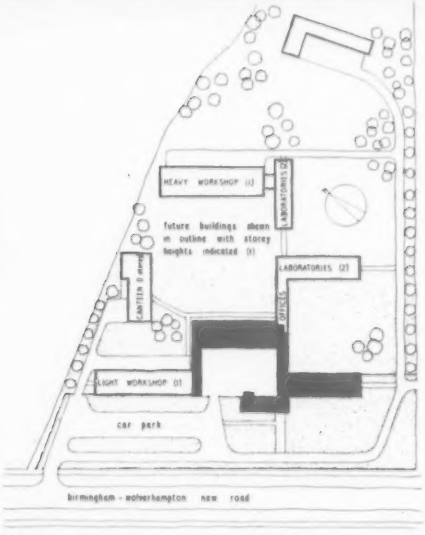
architects :

LAVENDER, TWENTYMAN & PERCY,

assistants :

L. H. Howles, J. Van Rees, R. H. Fellows.

consulting engineers : C. Howard Crane



THIS new building occupies a fine site on the main Wolverhampton - Birmingham arterial road and serves as a central research laboratory for the whole Guest, Keen and Nettleford Group of Companies.

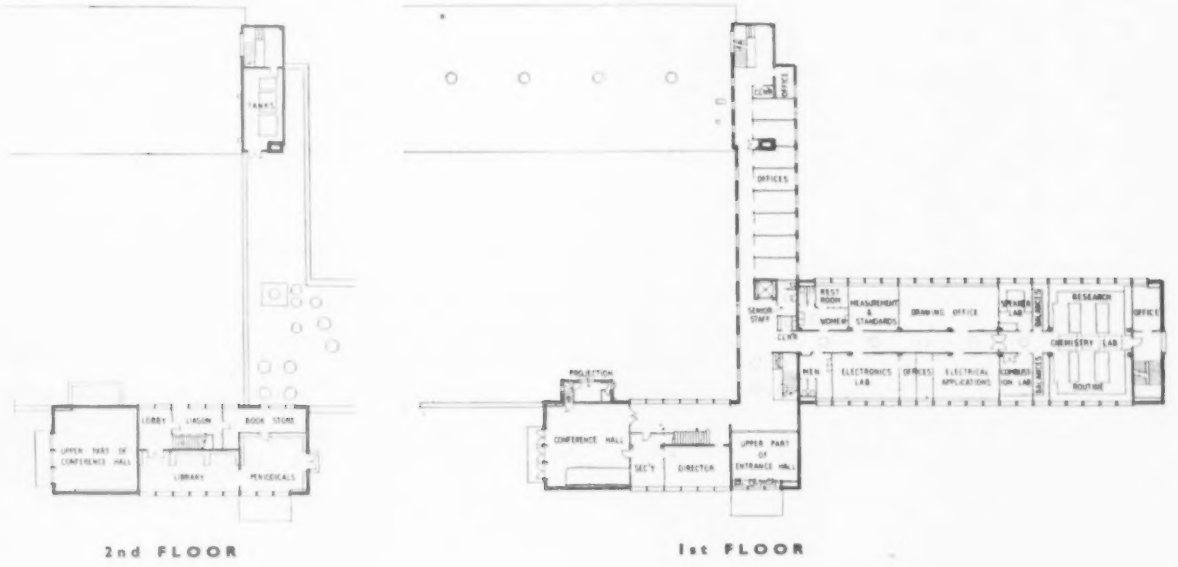
The building consists of :—(1) A 3-storey *Administration Block* containing entrance hall, offices, canteen, conference hall and library. (2) *The Laboratory Block* (2 storeys plus basement), containing departments for chemistry, physics, metallurgy and electronics. (3) *The Stores Block* (2 storeys plus basement), containing boiler house, central stores and offices. (4) *The Workshop Block* (single storey), containing all rooms where heavy machinery is required or noisy processes take place. (5) *The Cycle Shed, Garage and Shed for Transformer.*

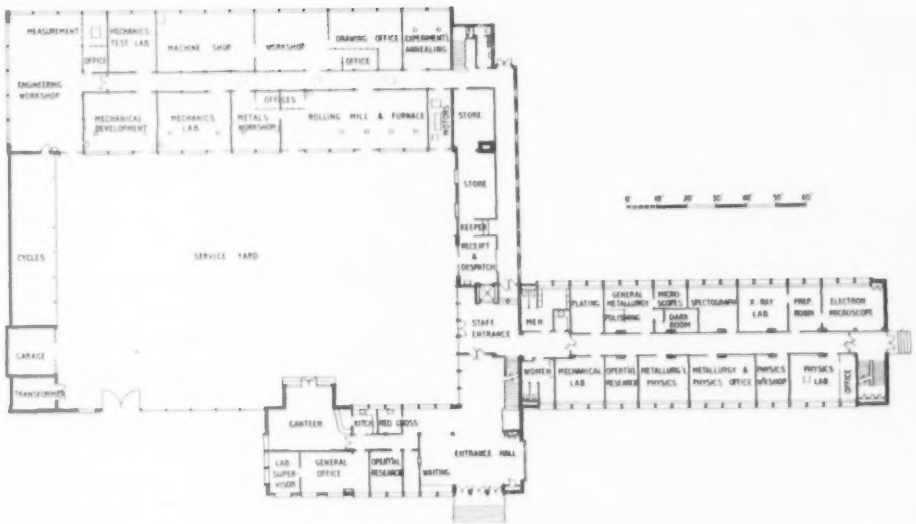
General Construction

Monolithic reinforced concrete is used except in the single-storey portion ; its use enables stanchions on the outer walls to be avoided (for the reasons given above), and also avoids beams in the laboratory ceilings.

The concrete walls are 6in thick and the concrete mullions carrying the load are 12in x 6in. The hollow tile floors span from wall to corridor beams in the Laboratory Block (or to 6in wide concrete spine walls in the other blocks), and there are thus no beams in the ceilings of the various rooms.

In the Laboratory Block the wall below window cills



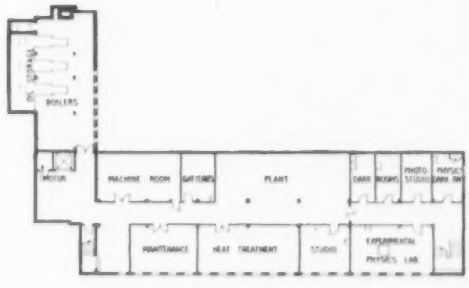


has 6in wide stiffening ribs, projecting 3in from the face below each window mullion and the space between the ribs is filled with 3in woodwool slabs, which acted as permanent shuttering; in front of the woodwool are fixed reeded aluminium panels. Lengths of 6in x 6in Portland Stone are fixed by bronze cramps to the faces (on the same plane) of the ribs and the concrete mullions.

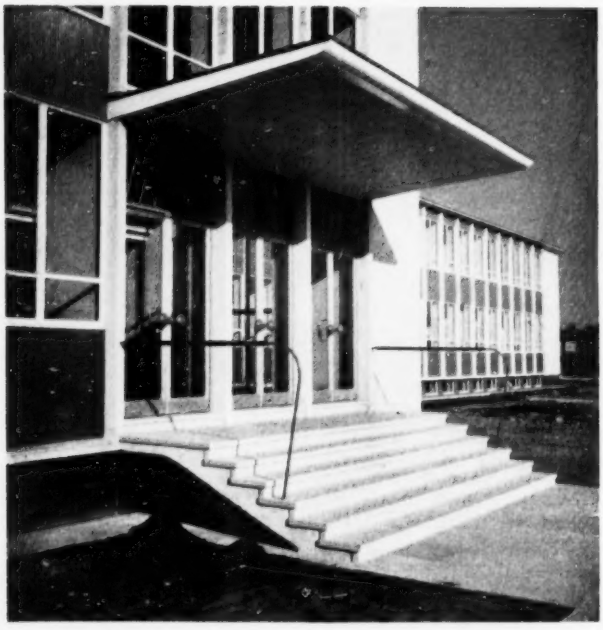
The blank walls are faced with 2in woodwool slabs on the inside and 3in Portland Stone slabs on the outside, both acting as permanent shuttering.

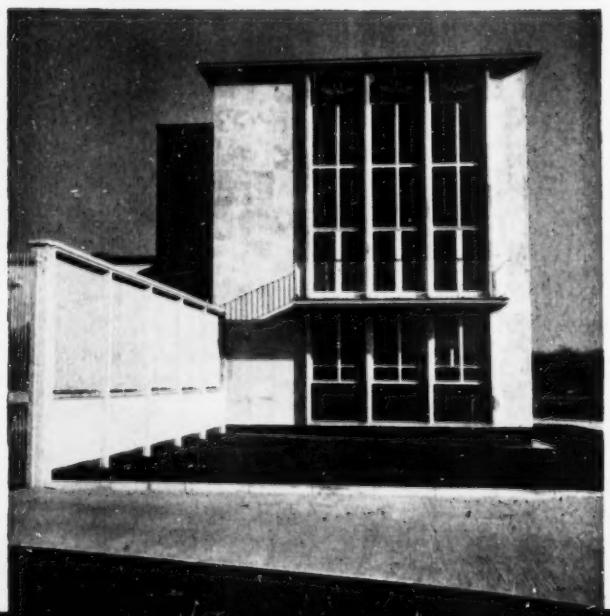
The roofs are of hollow tile construction, covered with woodwool slabs and asphalte.

Internal partitions in the laboratories are of a patent lightweight concrete block which will hold screws and



G.K.N. GROUP RESEARCH LABORATORY





Top: Main Entrance Doors and Canopy.
Middle: Admin. Block from Service Yard.
Bottom: Conference Hall Windows and Balcony.

nails without spalling. Walls are plastered and painted.

The Administration Block is of similar construction except that the 12in x 6in concrete ribs run from ground floor level to the roof, becoming mullions as they pass the windows. The external walls of the Stores Block are of 6in concrete lined with 2in woodwool slabs.

The Workshop Block is constructed with a light steel frame and precast concrete wall and roof units on the Hilcon system. The roof is covered with asphalte; internal partitions are of 4½in brick.

Expansion joints are provided between the Laboratory Block and the Stores Block and between the latter and the Workshop Block.

Services

There is a goods lift for moving heavy objects from the stores to the basement or first floor. There is an internal telephone system and electric clocks are provided; the dials for these were designed by the Architects.

Heating is by low pressure hot water from oil-fired boilers.

External Finishes

The main elevations are faced with Portland Stone, as already described, with the panels between windows of reeded aluminium painted dull blue. The plinth is faced with brown faience slabs; the copings are of concrete, finished smooth and painted, and are covered with copper. The walls of the Stores Block are also of smooth concrete, painted. All windows are of galvanized steel.

The canopy over the main entrance is of concrete with the soffit and edges covered with painted aluminium sheet. Steps are of York Stone.

The metal shield and the emblems over the main entrance were designed by Peter Goffin and made in the client's own workshop. The shield contains alchemist's symbols and also shapes suggesting some of the products of the Group.

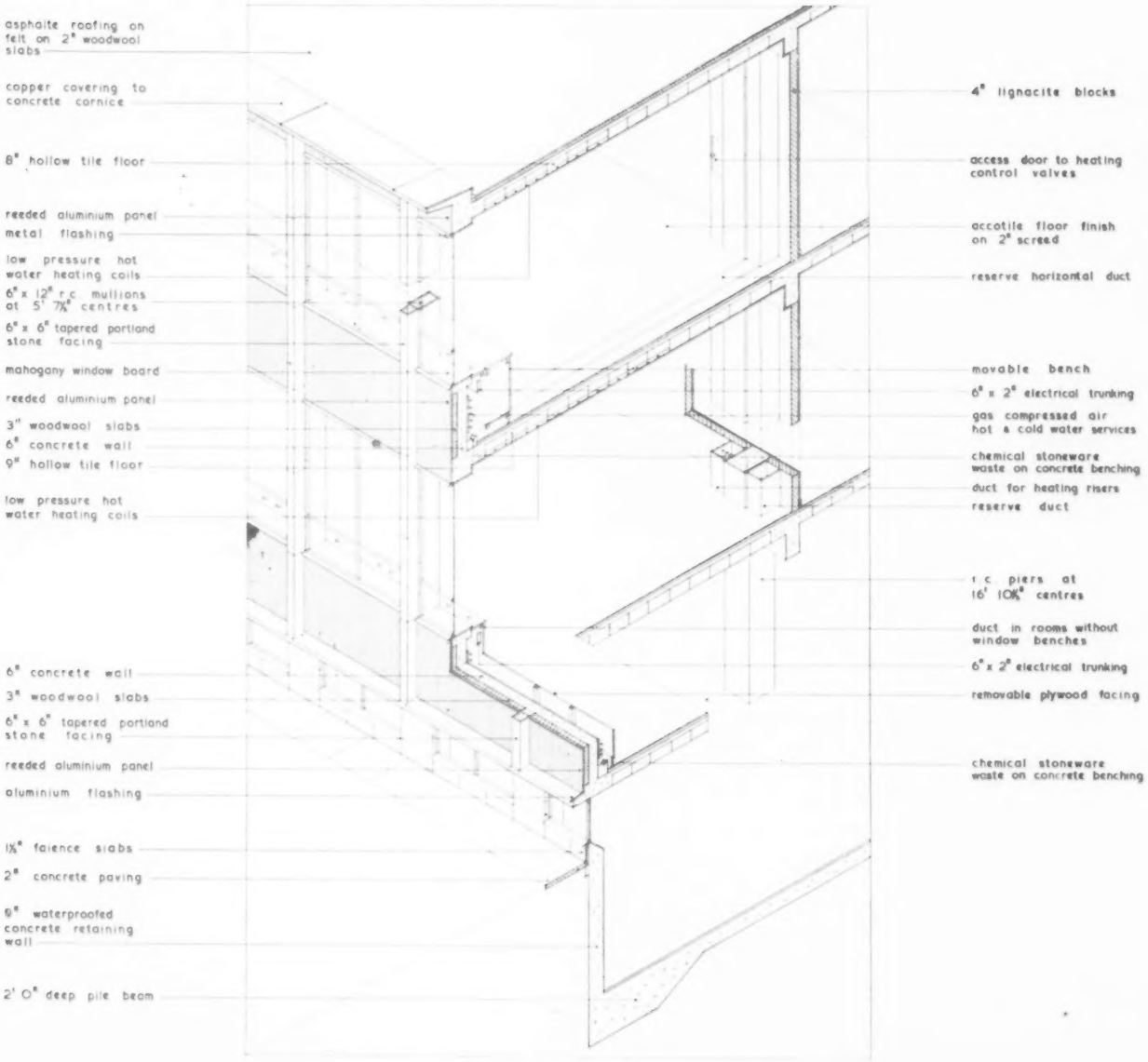
Workshop Block

This was planned as a single storey block so that heavy machinery could be installed where required. The module here is the 8ft 3in of the prefabricated construction used.

The staircase and tank room block at the end of this wing is designed for future extension eastwards if required.

Floors are of grano, walls of painted brickwork and ceilings of fibre board. Radiators are used for heating.

[Continued on page 12



Metal shield and emblems over the main entrance.

The Workshop Block.

G.K.N. GROUP LABORATORY

Laboratory Block

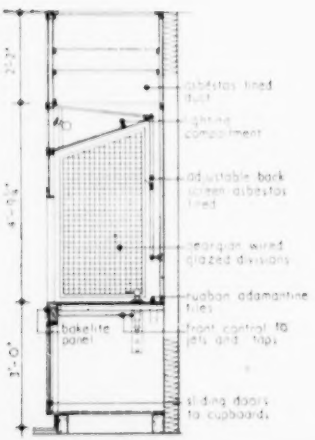
The requirements were for a large number of small laboratories, and a central corridor with 16 ft deep laboratories each side was therefore chosen.

Flexibility was thought to be of great importance, and a module of 5ft 7½in is used; this allows for a large variety in lengths or rooms and simplifies future re-planning of departments.

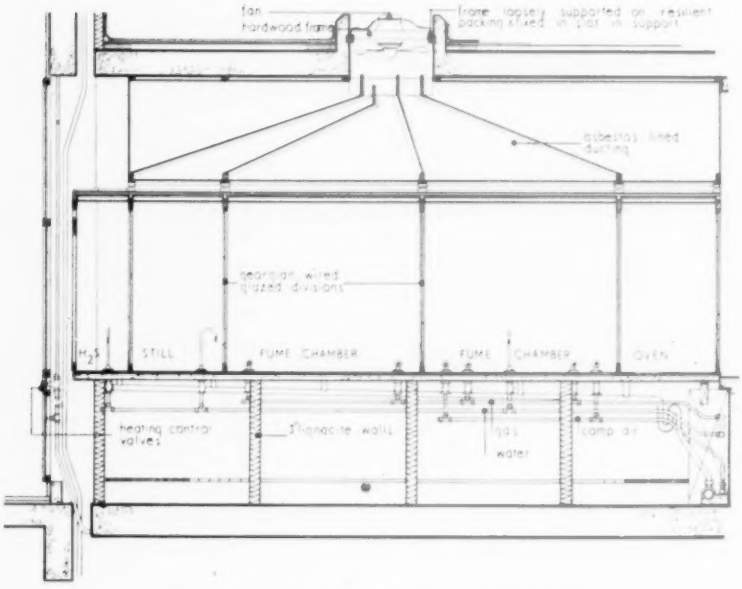
The positions of service ducts was, of course, a major determining factor in the design. The system of vertical ducts at intervals along the exterior walls was discarded as not flexible enough and as interfering too much with the day-lighting of the smaller rooms. The system of vertical ducts along the corridor walls was also discarded as it would have increased the breadth of the block and also the height (by requiring false ceilings or thicker floors to house the connections to the benches under the windows); and thus the cost.

The system used consists of

Chemical Laboratory Details
Scale: ¼" = 1ft

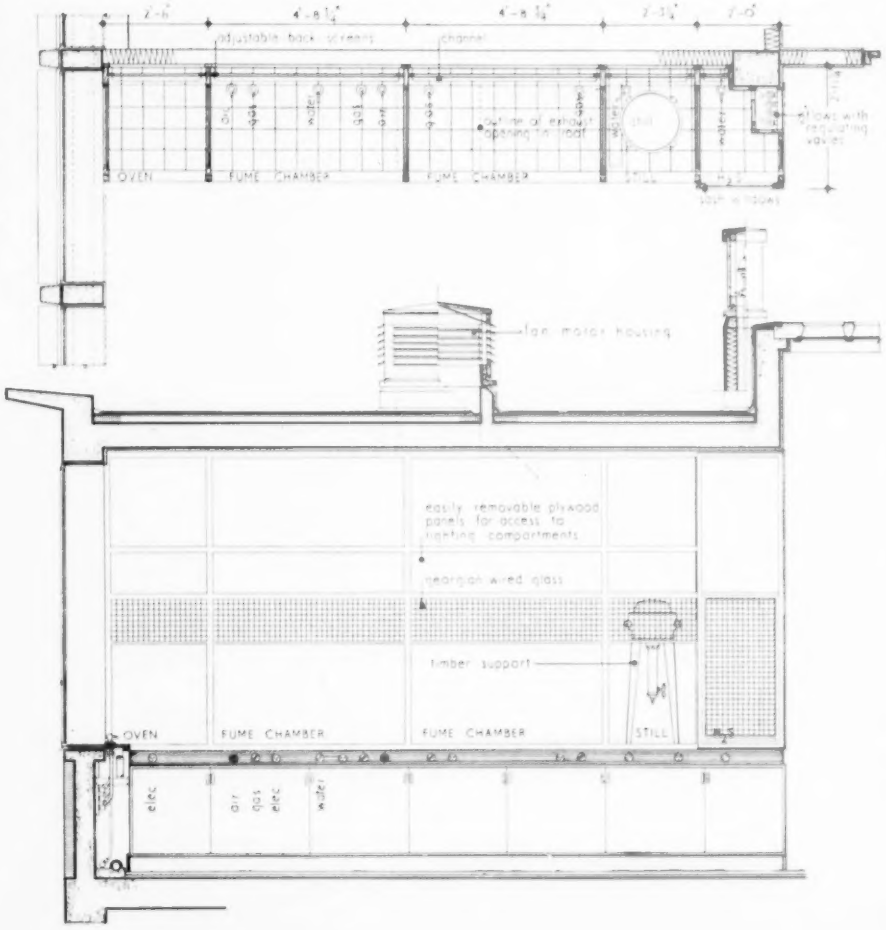


Section



Section through fume cupboard

Plan and Elevation (below)



four vertical ducts, one at each corner of the block, with horizontal ducts along the outer walls below sill level. These horizontal ducts are 9½in wide by 2ft 10in high and, as there are no stanchions to obstruct the run of the pipes, they take up very little room in the laboratories.

Services generally have actual or blanked-off connections every 11ft 3in along these ducts.

There are also small vertical ducts, 10in × 8in, each side of the corridor stanchions. Half of these are used for the heating pipes and the other half are left as a reserve, so that if any new service (such as distilled water), not now provided, was required in the future, easy connections could be made. Each reserve duct connects to a horizontal duct running across the room and formed by omitting a row of hollow tiles from the floor, which spans in this direction.

This duct system would not be possible for laboratories where drainage from island benches on upper floors is necessary. The only island benches here are in the Chemistry Department, and, while services are run to these benches, no drainage is required from them, all sinks being in benches along the walls.

The laboratories are supplied with gas, compressed air, and hot and cold water, the latter from storage tanks to avoid fluctuations in pressure. All laboratory drainage is in chemical earthenware.

Electrical current is supplied at 210 v. single-phase and 400 v. three-phase. In addition there are terminal boards supplying direct current up to 110 v. in 2 v. stages from storage batteries in the basement. It is possible for rooms on this D.C. system to be interconnected by means of a central "exchange" board.

Fume cupboard gases are extracted by means of variable speed fans in the roof, arranged to be serviced from above.

The dark rooms are ventilated by fans direct into the corridor.

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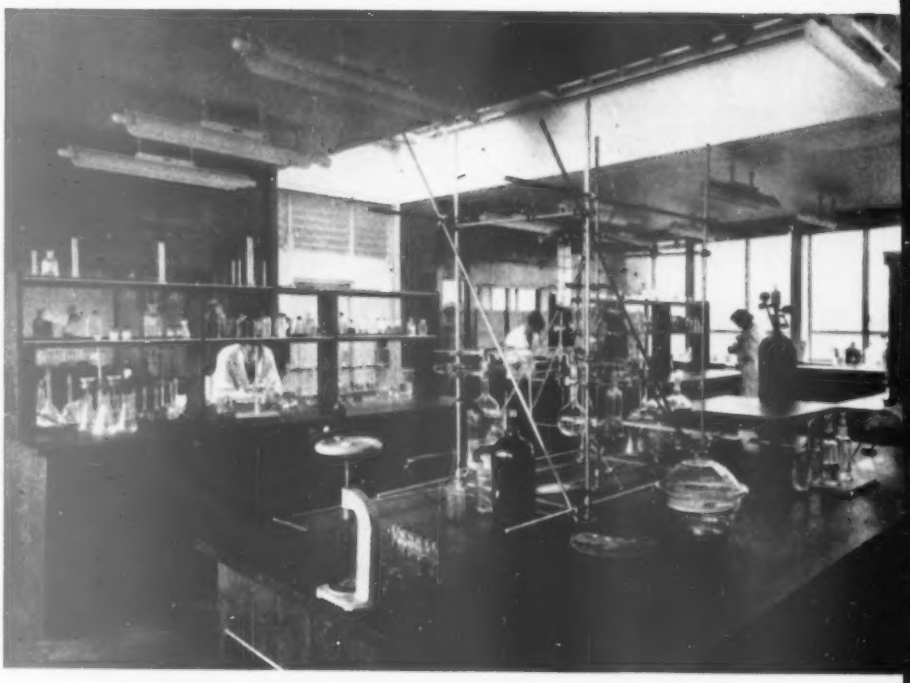
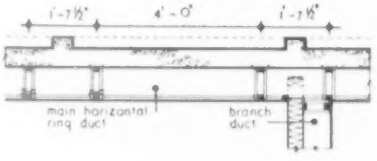
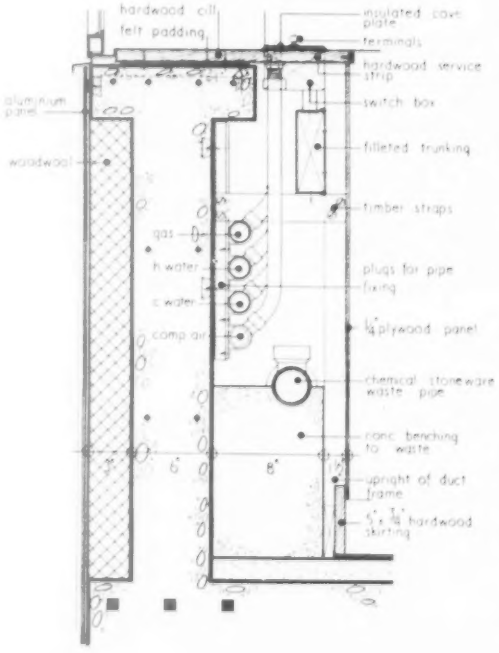


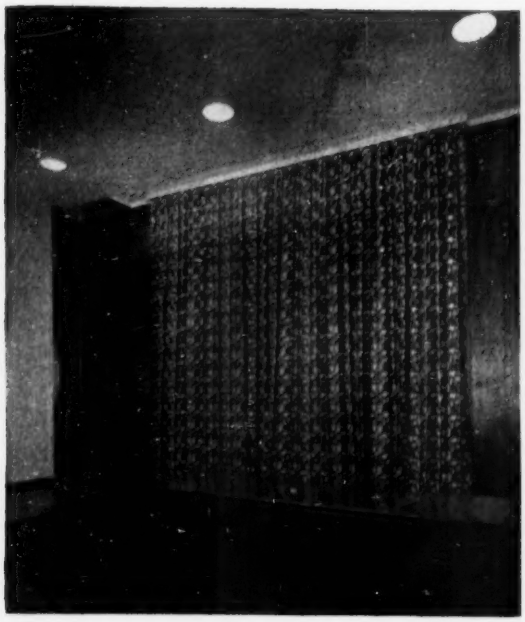
This view shows the Chemistry Laboratory. The floor is of teak block. Walls are plastered and painted.



Ducting Details



General Contractors: F. & E. V. Linford, Ltd. *Accoutle Flooring:* Rowan & Boden, Ltd. *Acoustic Materials:* May Acoustics, Ltd. *Applied Lettering:* A. Edmunds & Co., Ltd. *Asphalt Roofing:* Limmer & Trinidad Lake Asphalt Co., Ltd. *Bricks—Facing:* Himley Brick Co., Ltd. *Collapsible Metal Doors:* The Bolton Gate Co., Ltd. *Concrete Piling:* Franki Compressed Pile Co., Ltd. *Concrete Reinforcement:* Twisteel Reinforcement, Ltd. *Concrete Roof Light:* Lenscrete, Ltd. *Cork Tile Flooring:* John Aubanel & Partners. *Domelights:* Pilkington Bros., Ltd. *Electrical Installation:* Lee Beesley & Co., Ltd. *Electric Clocks & Movements:* Gent & Co., Ltd. *Faience Tiles:* Shaws Glazed Brick Co., Ltd. *Firehose Reels:* Pyrene Co., Ltd. *Floor Tiles:* Langley London, Ltd. *Laboratory Benches & Fittings:* Southall Bros. & Barclay (1935), Ltd. *Lift:* Keighley Lifts, Ltd. *Light Fittings:* Crompton Parkinson, Ltd.; Troughton & Young, Ltd.; The Merchant Adventurers of London, Ltd. *Light Steel Frame, Steel Doors, Windows and cladding units for workshop:* Hills (West Bromwich), Ltd. *Louvred Blinds:* J. Avery & Co., Ltd. *Marble Wall Lining:* Anselm Odling & Sons, Ltd. *Neutralizing Chamber:* Prodorite, Ltd. *Panel Heating Installation; Hot & Cold Water Services; Gas & Compressed Air Services:* Rosser & Russell, Ltd. *Panelling in Conference Hall & Lobby:* Harris & Sheldon, Ltd. *Partition Blocks:* Lignacite, Ltd. *Plumbing Fittings ("Kontite"):* Kay & Co., Ltd. *Portland Stone:* Bath & Portland Stone Firms, Ltd. *Sanitary Fittings:* Howson & Sons, Ltd. *Steel Duct Covers:* Walsall Conduits, Ltd. *Steel Partitions & Door Frames:* Sankey-Sheldon, Ltd. *Steel Windows, Doors & Aluminium Entrance Doors; Aluminium Panels & Flashings, Balustrades, Grilles & Column Bases; Door Furniture; Clocks:* James Gibbons, Ltd. *Sump Pumps:* Broadwall Engineering Co., Ltd. *Terrazzo Paving & Window Sills:* Marbello & Durus, Ltd. *Wood Wool Slabs & Plasters:* Gyproc Products, Ltd. *Wood Block Flooring:* Stevens & Adams, Ltd. *Wrought Iron Gates, Fencing & Balustrades:* Bayliss Jones & Bayliss, Ltd.



Conference Hall | *Library*

Lobby to Conference Room | *Main Entrance Hall*

The two-storeyed Entrance Hall is paved with green Terrazzo tiles on the ground floor and cork tiles on the landing. The walls round the staircase are faced with Travertine; other walls are faced with mahogany panelling or are painted. The ceiling is of acoustic material. Stairs are of white Terrazzo with mahogany handrail, and balusters stoverized blue with polished brass bases.

In the Conference Hall the wall behind the platform is wallpapered, the opposite wall is faced with acoustic tiles, and the other two walls are panelled in mahogany-faced plywood. The ceiling is covered with acoustic material.

The concrete stairs to the Library have mahogany risers with cork treads; the wall by the stairs and the spandrel wall are faced with mahogany-faced blockboard and the ceiling by sycamore-faced plywood. The Library shelving is of mahogany with adjustable shelves. Floors throughout this part of the building are in cork tiles.

G.K.N. GROUP RESEARCH LABORATORY

ST. PAUL'S CHURCH

STRATFORD, E

Architects:
HUMPHRYS & HURST
F.A.R.I.B.A.

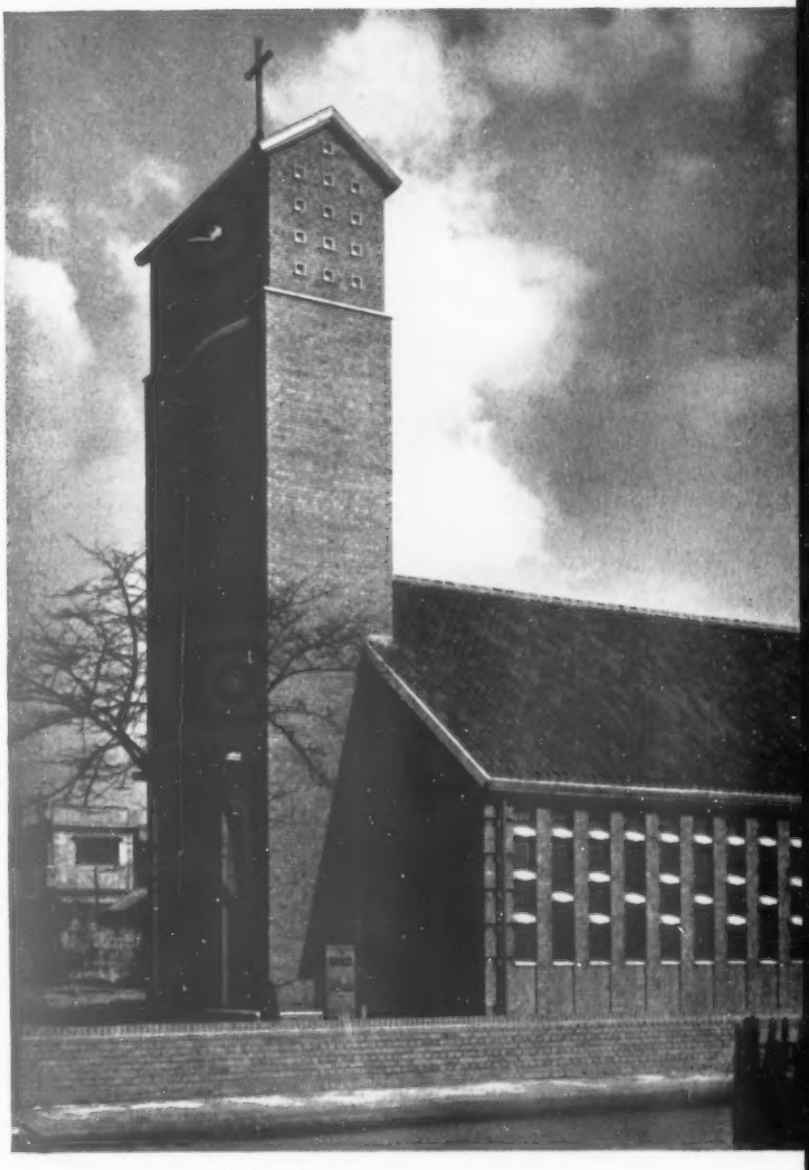
AS part of the Chelmsford Diocesan Reorganization plan for new Churches it was decided that the Parish Church of St. Paul, Stratford, should be replaced on the site of the previous building, which was destroyed by bombing during the war, by a new and smaller Church to seat approximately 300 people.

As the new Church is considerably smaller than the old one, it has been placed close to both road frontages to enable the remainder of the site to be developed as a group of buildings including a Church Hall and a Vicarage. The badly damaged Church School on the adjoining land is shortly to be demolished and the immediate neighbourhood of the Church will be a new housing estate.

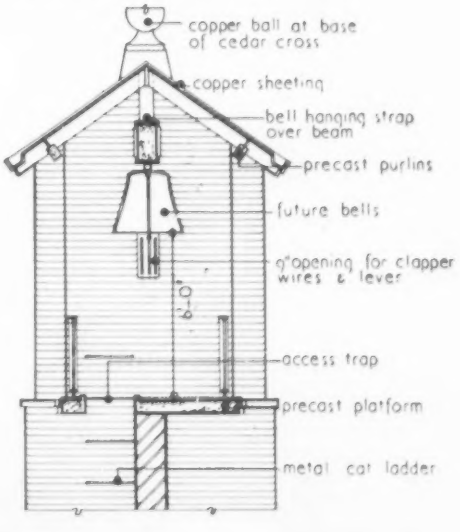
The principal considerations affecting the choice of scheme was that it should be in accordance with the evangelical tradition of the Parish and that the cost should be kept as low as possible.

The plan is accordingly simple, having a combined Chancel and Sanctuary and a wide and short Nave, which enables all members of the congregation to have a clear view of the Altar. The height of the building has been restricted both on grounds of cost and as it was considered that dignity could be achieved without recourse to loftiness.

The organ is situated at the West end of the Church at the base of a



The church from South-West.
Below the tower. Scale: 1in = 6ft



bell tower, which has been designed to house three bells, which will be provided from war-damaged Churches which are not to be rebuilt.

Construction

The new building is constructed with 14in brick panel walls faced with sand-faced red bricks, which are supported on reinforced concrete ground beams spanning between the cast *in situ* reinforced concrete arched frames. The Tower is built in brickwork on a reinforced concrete raft foundation.

Owing to the limited quantity of timber available the roof is constructed of 2in reinforced "Thermacoust" slats supported by prestressed concrete purlins, the external covering being brown sand-faced pantiles on battens and felt.

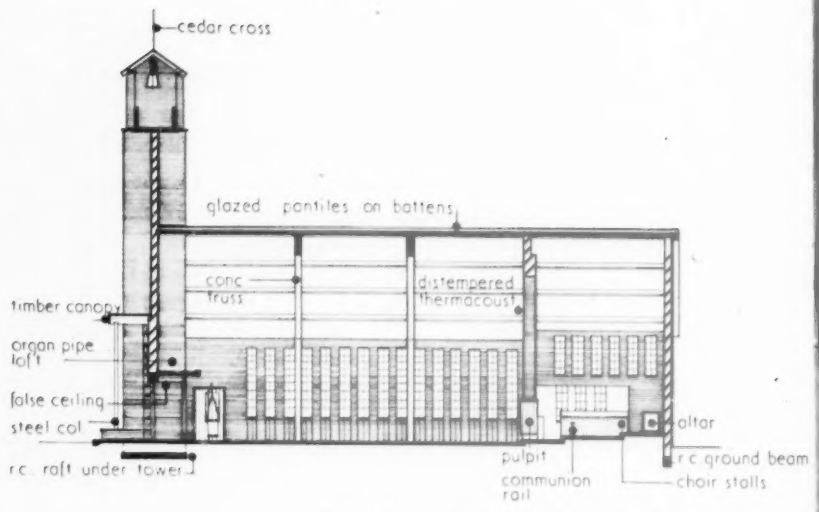
The Nave windows are leaded lights with light cames between brick mullions with a pattern of artificial stone slab transomes.

Eaves, gutters and verges are cast *in situ* concrete faced with artificial stone. The panel over the West door is in Terrazzo slabs with a Hopton wood aggregate.

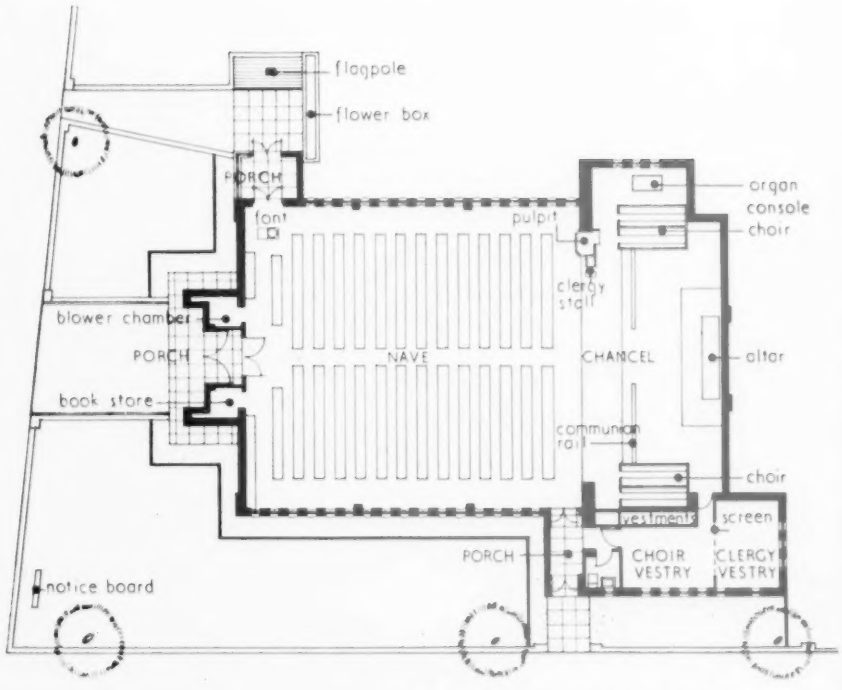
All external joinery is in natural oak lightly waxed.

Internal Finishes

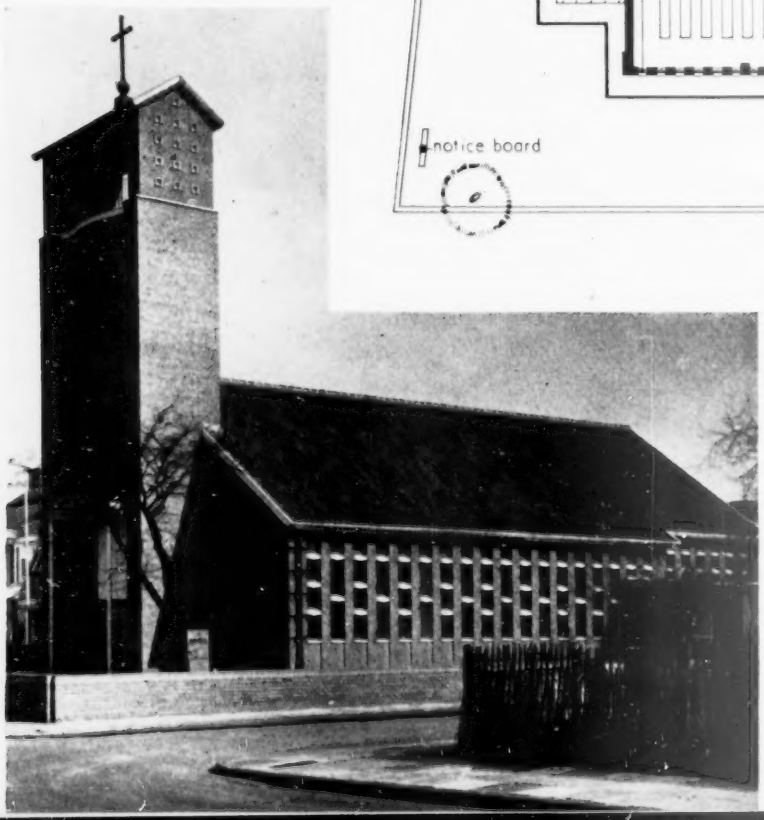
The internal colour scheme is



Section. Scale: 32ft to 1in



Plan. Scale: 32ft to 1in



ST. PAUL'S CHURCH, STRATFORD

based on light tones of pink, grey and blue with the Cross on the East wall and the Pulpit stressed in dark blue, gold and red.

The floor under the pews is of mahogany blocks, the remainder of the floor being in a pattern of grey " Accotiles " with oak nosings to the Chancel steps.

The pews were obtained from a war-damaged Church and, after reconstruction, were painted warm grey.

The remainder of the furnishings are in oak stained grey and waxed.

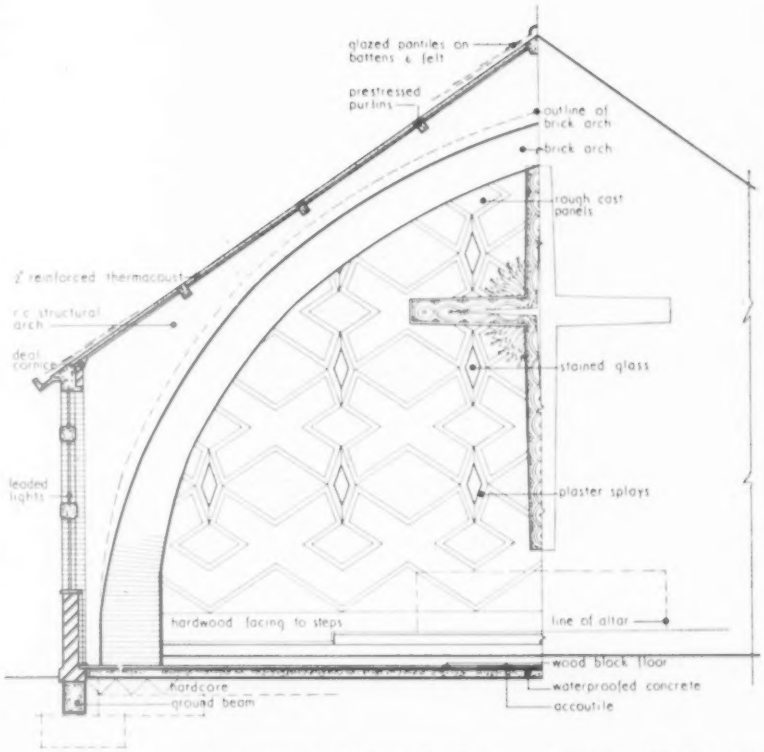
Services

Heating is by means of gas-operated convector units which are coloured to match the pews.

Lighting is by floodlights situated behind the main arches and supplemented by hanging chandeliers.

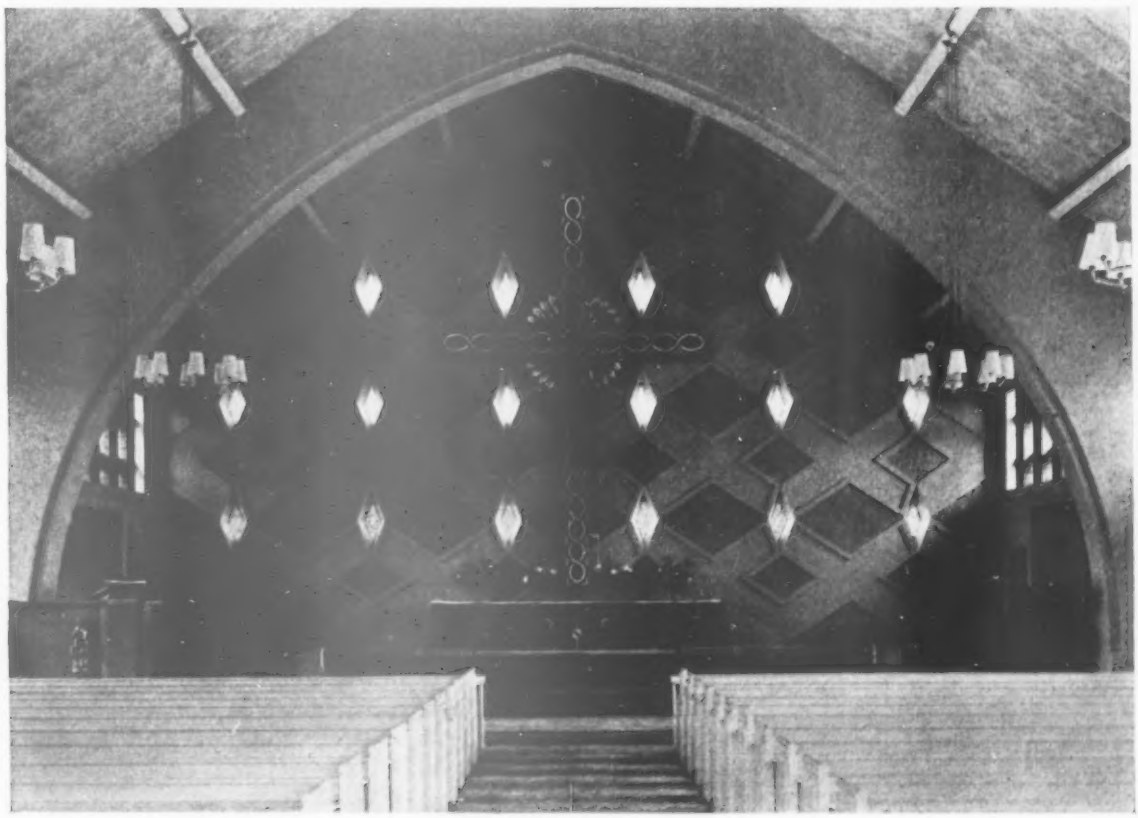
Cost

The total cost of the building, including site works and furnishings, is approximately £18,000.

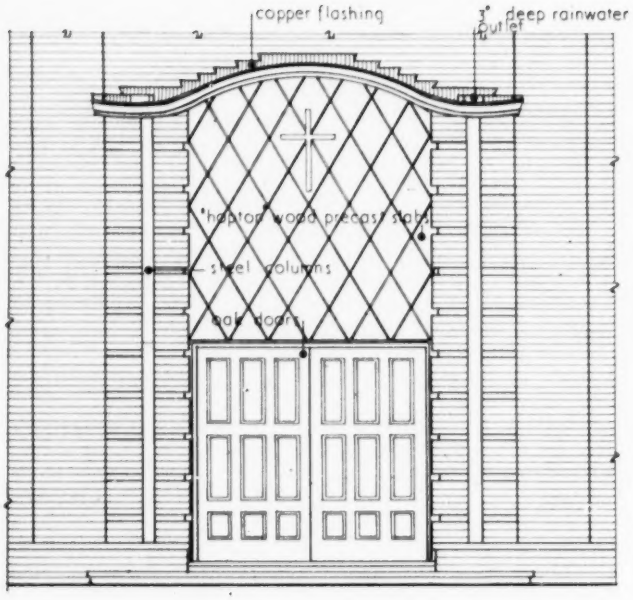


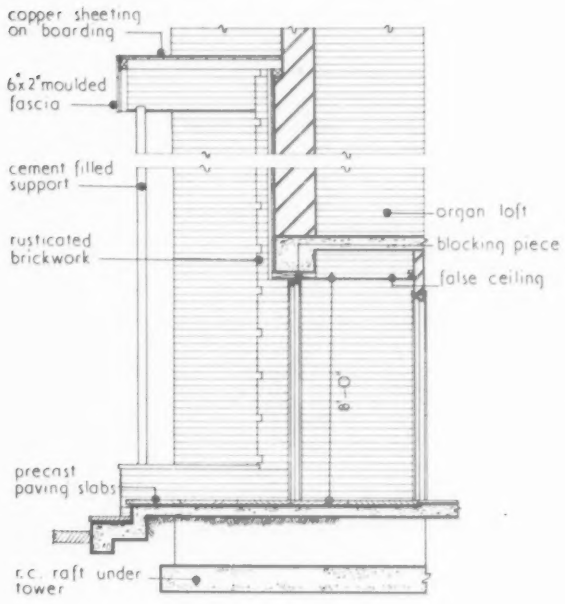
½-Section through Nave. Scale: 8ft to 1in

Nave and Sanctuary

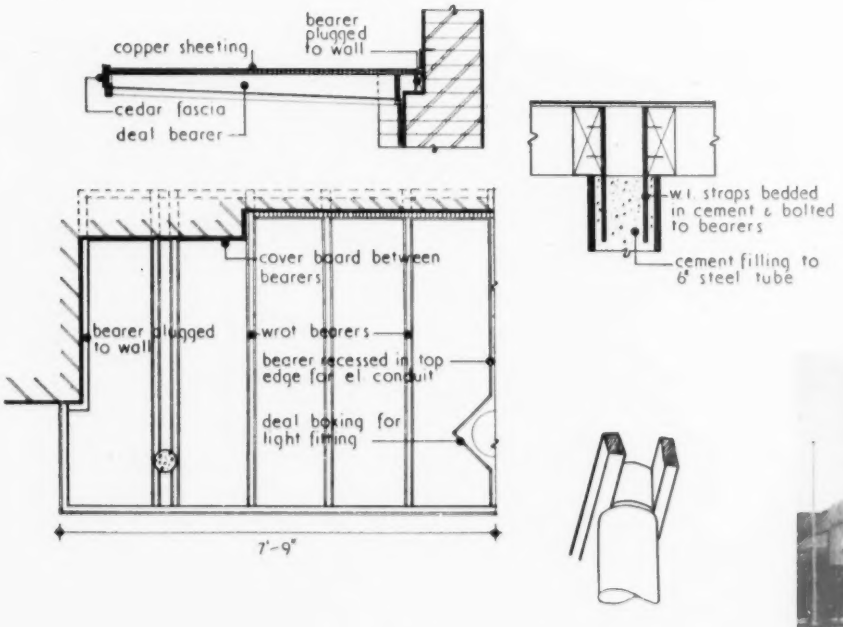


details overleaf





Details of the Porch. Scales: 1" = 6FT. & 3FT.



ST. PAUL'S CHURCH, STRATFORD

General Contractors: **Hammond & Miles Ltd.**

Accotile Flooring: Armstrong Cork Co., Ltd. *Artificial Stone Facings:* Stuarts Granolithic Co., Ltd. *Chancel Furnishings:* A. Robinson. *Electrical Work:* Escott Brothers, Ltd. *Gas Heaters:* British Trane Co., Ltd. *Gas Supplies:* North Thames Gas Board. *Metal & Leaded Light Windows:* British Challenge Glazing Co., Ltd. *Organ:* Robert Slater & Son. *Pantiles:* Roberts Adlard & Co., Ltd. *Window Glazing (Coloured):* The A. K. Nicholson Stained Glass Studios. *Wood Block Flooring:* Hollis Bros., Ltd. *Wrought Iron Railings:* Cashmore Art Workers.

OPINION

ARCHITECTS AND DIRECTORSHIPS

THE R.I.B.A. Code of Professional Conduct prohibits an architect from being a director of a firm trading in building materials or whose activities are connected with the building industry. The suggestion is sometimes made that architects should be freed from this restriction, and it is worth while examining this in some detail.

What the Code says is comprehensive enough, and the second part may be understood to embrace anything from locksmithing to general contracting. The intention is also clear. The architect's service to his client is assumed to require completely impartial advice in the selection of materials, components and executants, and it will not do to have any suspicion that he is tempted to "plug."

When it is remembered what a high proportion of to-day's building is in the hands of specialist firms making and supplying ready-made components, it may be thought surprising that "components" are not mentioned in the Code—it refers specifically only to "materials." This is taken by some critics as relating the Code to conditions not now existing—those of the days when the builder on the one hand and a supply of raw "materials" on the other were all that was necessary for the production of a building.

A review of the current production of building "components," as opposed to materials, shows the need for their being designed by architects, and it is obviously absurd that in designing a building one should have to incorporate, for want of better, things that have come no nearer to being designed than collaboration between sales manager and production draughtsman.

The need for skilled design is becoming slowly more and more apparent to manufacturers, and while some have been contented for their products to be "styled" by some second-rate designer, in other cases there has been collaboration with an architect with happy results. This collaboration has now extended into the field of complete prefabricated building systems.

It is to meet these developing circumstances that the suggestion is made to permit an architect to take a directorship, rather than that he should remain simply, as he is sometimes described, a "hired technician."

Up to now the architect has, within the restrictions of the Code of Conduct, either become an employee of the producing company or, more generally, has acted in a consultative capacity, remunerated by an agreed designing fee, with or without a royalty on production. How seriously his advice is taken, and how closely the finished product resembles his design, depend on a number of factors. If he holds a very strong patent or design registration (a very rare circumstance), or if he has behind him an assured market, while being himself a man of tenacity and yet of tact, the chances are that his skill will issue in something worth while. Often, however, a preponderance of other voices within the firm will see his design modified, sometimes disastrously, before production, and in a surprising number of cases a design eagerly commissioned and readily paid for gets its production postponed indefinitely, simply through vacillation of policy. A seat on the Board, it is contended, would put the designer in a central position of policy making and would give him the authority which he at present lacks to see that his firm and its products get the full benefit of his designing ability.

In this proposition there is no need to consider the man who is going to devote his whole time to the development of building components, to the exclusion of any other practice. He simply gives up his membership of the R.I.B.A., becomes a director, and continues to apply his designing skill. It is, by contrast, the architect continuing in practice and wishing at the same time to participate as a director in component design who comes up against the Code.

It may be worth while to digress for a moment to consider the most extreme form in which the Code prohibition as it exists may be contravened—that is, by an architect becoming a director of a firm of building contractors. This is suggested from time to time, and the argument proceeds that contracting firms frequently include on their Board a qualified Civil Engineer, who looks after his special departments of their work. Such Boards would benefit greatly, they say, if there were also an architect, to give due weight to the building and finishing aspects.

There is here some confusion about what the Engineer on the Board is doing. In general, he is there to use his special ability as a structural designer in order to let the firm apply the right machinery at the right place, and to carry out its temporary works with safety as well as economy. He does not influence the design of the end product, for which his firm has tendered on drawings prepared by the employer's engineer. His opposite number on the building side is somebody trained in building construction and management—not an architect.

In those cases where the engineer on the Board does make the design, his firm is submitting a competitive scheme for some relatively limited or specialized objective. An architect acting in an analogous capacity would be, in fact, taking part in a kind of very unorthodox architectural competition.

Or, of course, it could be one of those jobs where the one contracting firm alone is approached, their engineer makes the design, and "full service" is provided. It is doubtless the wish of many a building firm to be able to give "full service" in respect of architectural aspects as well—avoiding thereby competitive tendering and some of the rigours of supervision. Clearly an architectural directorship in this sense would make hay of any impartiality a man might try to keep in his other practice, and if an architect wanted to become a member of such a Board it is difficult to see any solution for him other than to give up his R.I.B.A. membership and go into the building industry as a full-time job. It is doubtful whether his presence on the Board could much increase the confidence of another architect inviting tenders from the firm.

Returning to the components industries, in which it is suggested that only a directorship will secure due weight for the architect's ideas, it is difficult to see that there is anything wrong in an architect having a financial interest in something he himself has designed. In recommending such a product he is merely giving his client the benefit of his designing ability in an extended field. The implications of a seat on the Board seem to vary, however, according to the nature of the production concerned.

In the first place, let us take things like sanitary fireclay, cast iron boilers and stoves, steel-pressed goods, and other products which require expensive and specialized plant. With these, a new "line" designed by an architect will probably be only a small part of a large firm's total production. If the architect becomes a director he will inevitably become endowed with some financial interest, even if indirect, in the firm's other activities, and there is a risk of his impartiality being compromised.

X's new range of sanitary ware may be first-rate, because our architect-director has designed it, but he may very well know that their boilers, the design of which may not have been changed for some years, are not as good as their competitors'. When his client wants w.c.s all is well—they should be X's for every good reason—but when it comes to boilers there is divided loyalty, or at least the appearance of it.

In the second place, if the production needs only light machinery and relatively little outlay, or if it is something quite new and out of the line of existing firms, then a new company may be formed, and if it is a good thing the architect designing it may be the principal shareholder or at least the managing director. Some architects do

in fact produce furniture of their own design in this way.

These circumstances seem to leave the architect in at least a morally sound position relative to his clients, and suggest possible conditions within which the R.I.B.A. Code might be considered for modification. It might be thought reasonable to permit the taking-up of a directorship in a company producing things made to the architect's own design or that of other architects.

In the third place, consideration of building components leads to thinking about complete systems of prefabricated construction. Many an architect to-day, in the course of wrestling with the sinuosities of materials supplied, has, in detailing one or two jobs, evolved with some specialist at least a partial system of post-and-panel wall, roof decking, or floor elements, and taken the additional work in his stride. But the development of *ad hoc* solutions into a system that can be applied more universally, with a range of equally effective results for different conditions, is a much more exacting job. It calls for close architectural supervision at every stage, not only on the drawing board and at laboratory and field tests, but also in making the prototype, and in the design of the production layout and the erection system. A directorship seems here to be the obvious solution, despite the existence of successful systems which have been evolved with the architect solely as professional consultant.

The ease or otherwise with which such a directorship would be acceptable to the profession, generally, would appear to depend much upon the financial arrangements in the individual case. Some new systems have been evolved by an architect acting with one or two specialist firms and a general contractor. If the ultimate production remains in the hands of the contractor, then some of the difficulties suggested above might arise. If, however, a separate producing company is formed, directorship might be acceptable, as in the case last considered, a decision depending probably on the nature of the financial ties with the other companies.

These rather cautious steps seem to be almost all that could be taken in this direction at present, and many members of the Institute would want to be satisfied that this is not the thin end of a hideous commercial wedge, before the Code could be considered for modification.

It is very clear, however, that some prompt action is necessary if architects are not to lose control of the design of the increasing proportion of their buildings which consists of ready-made components. The alternative action that comes first to mind is a propaganda drive by the R.I.B.A., perhaps in concert with the other bodies interested in industrial design, to increase the producing companies' sense of the necessity of employing architects as designers, and using their services to the full. This could be very effectively backed up by architects in their practices specifying only components they know to have been architecturally designed.

Obviously, however, such a process is not rapid, and meanwhile the drive to increase factory production and decrease site work goes on. If proper architectural participation is to be assured, the tempo demands that every proper method be used to this end, and side by side with propaganda and consumer pressure there seems to be justified, with due safeguards, a modification of the Code of Professional Conduct. It is to be hoped that members of the Royal Institute will give this, along with the other lines of attack, the consideration which it deserves.

LESLIE WOOD, A.R.I.B.A.

TIMBER NOTES

ALTHOUGH there are local shortages of some building sizes in various parts of the country, this should not be taken to indicate any coming shortage of softwood. Rather is the reverse true. This is always a slack time for timber because the fresh imports have only just started to arrive, and builders have been taking from stock for some months while ice has closed the Scandinavian and Russian ports. But now a considerable volume of softwood will be arriving for several months; in fact, already the importers have bought over 1,200,000 standards for arrival this year, which is a quantity above the limit likely to be set by the Government for licensing. It is probable that the softwood licensed for the whole of this year will not be much more than 1,100,000 standards. From this picture it will be readily realized that there is no need to fear any softwood shortage, and the abundance in coming months might encourage a competition for business which could lead to a slight fall in prices.

Softwood prices are showing some variation in different parts of the country. This is partly due to the need of sellers to obtain capital quickly to finance purchases for future delivery. However, there has been no indication of any weakening of the European timber market, with the exception of a slight easing in Austrian whitewood prices following devaluation. Otherwise, Swedish and Finnish redwood is still being sold at £77 a standard for 7in u/s. With Canadian prices there has been a break in recent weeks, and here values have dropped in hemlock by £5 a standard. It is thought there may be a further drop in these prices.

The Timber Directorate have placed on the market for tender by the timber trade some 20,000 standards from the strategic reserve stock held by the Government. They admit this timber is composed largely of wood which is deteriorating and no longer serves its emergency purpose in the stock, but some good-class wood is also included to complete the clearance of a few sites. Mainly Yugoslav whitewood and Canadian Douglas fir and hemlock are the species concerned. Prices will probably be much lower than the present market level for these woods, but their value is limited because of poor condition.

While the hardwood import ban remains on the non-sterling countries timbers from Africa are most important. Prices have been firm, but obeche has now dropped in price to a stage more compatible with its real value. Even if the import regulations are changed little alteration in hardwood prices can be expected, for it would be some time before fresh purchases could affect the market.

Import allocations for building boards for the second half of this year have now been made, and it is apparent there will be shortages of imported boards long before next January arrives. Builders will have to make greater use of home-produced boards. Those who prefer imported boards will have to be prepared to buy in advance of need and stock the boards themselves, for a shortage is likely to develop after October.

International Federation of Prestressing

The Prestressed Concrete Development Group announces that the first-ever General Assembly of the International Federation of Prestressing is to be held in this country and will take place in London from October 6-9, 1953.

The Headquarters of the Assembly for its duration will be at the Institution of Civil Engineers, Great George Street, London, S.W.1.

The Chairman of the Prestressed Concrete Development Group, Mr. D. H. New, will welcome the delegates and will preside during the election of the Governing Body.

Papers on three aspects of prestressed concrete will be presented at the Assembly; these are, the influence of abnormal temperatures on prestressed concrete constructions, design of statically determinate beams and slabs in prestressed concrete, based on ultimate load, and statically indeterminate constructions in prestressed concrete in the elastic and plastic phases. Delegates will also be given the opportunity of seeing developments in this country by means of organized visits to sites and products works.

Further information can be obtained from the Secretary, Prestressed Concrete Development Group, Cement and Concrete Association, 52, Grosvenor Gardens, London, S.W.1. Telephone: Sloane 5255.

* * *

Architectural models will play a strong part in "The Model Engineer" Exhibition which is to be held at the New Royal Horticultural Hall from August 19-29.

A Window in Naples

BY EDWARD BAWDEN A.R.A.

As in Naples, so in all climates Crittall Export Windows are specially adapted with louvres, flyscreens, shutters, and everything else required by the particular conditions encountered anywhere in the world.

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THE CRITTALL MANUFACTURING COMPANY LIMITED

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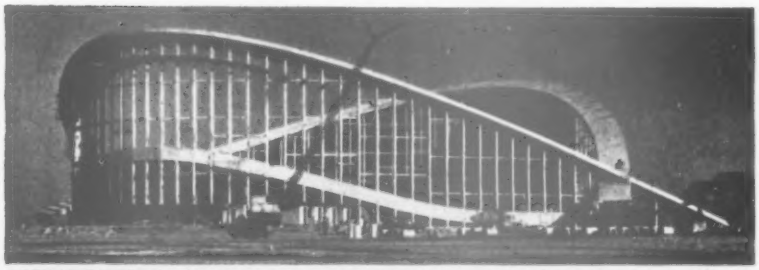
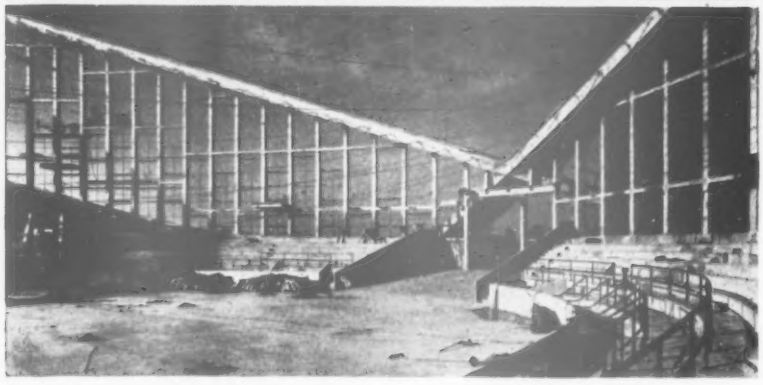
ADA.1





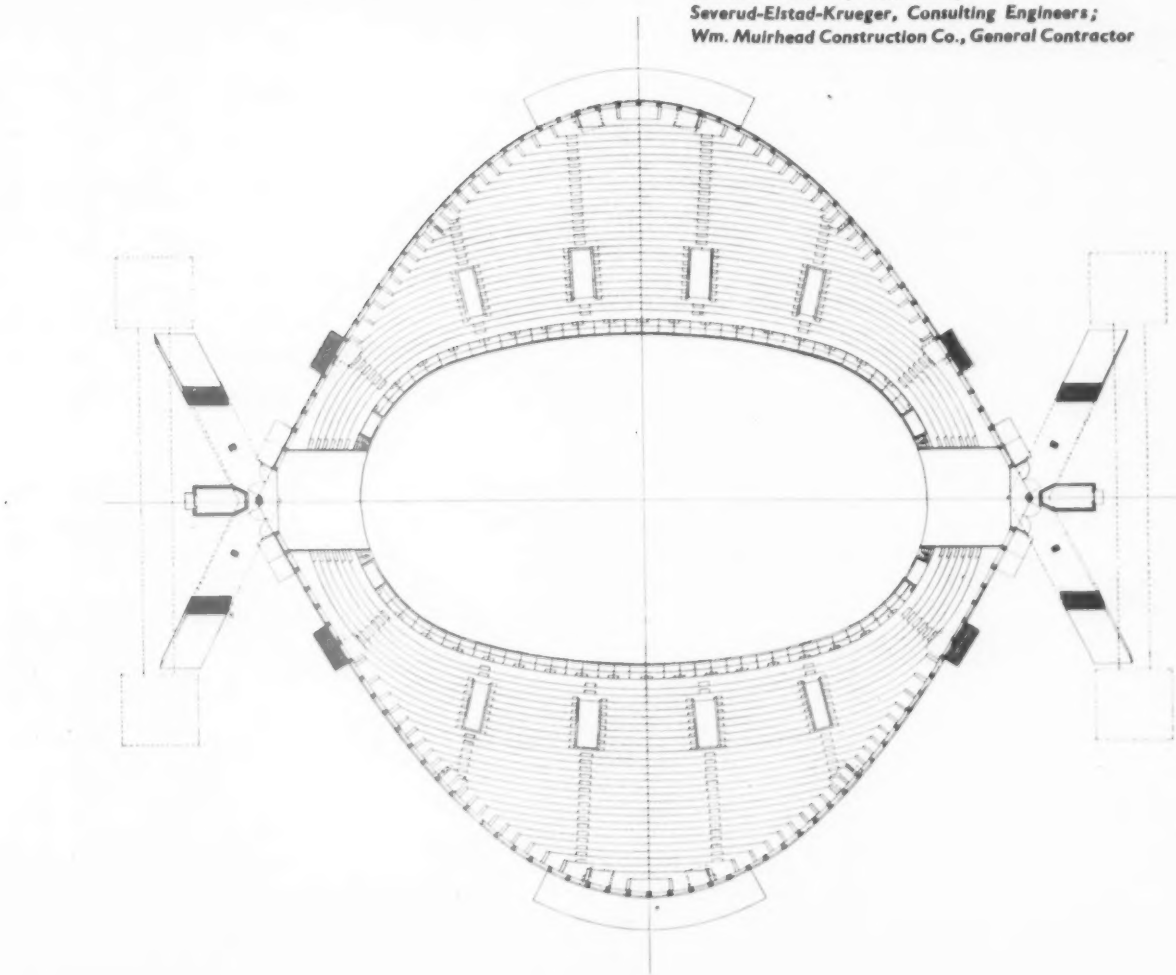
STADIUM IN NORTH CAROLINA

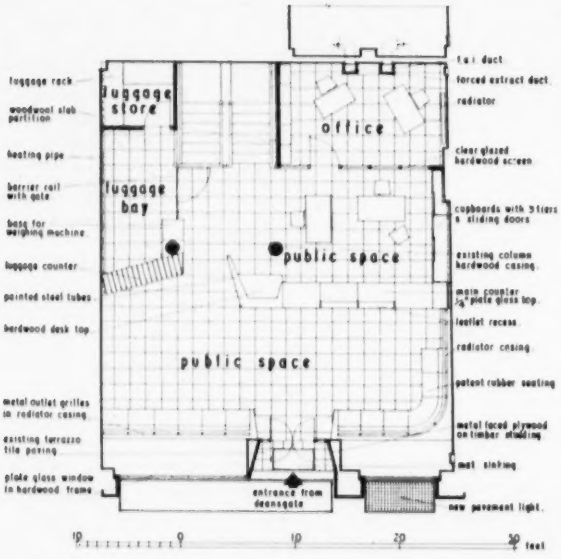
THE basic design of the Stadium is simple : two great upward curving arches supported on thin vertical columns, the roof hung between the arches and the shaped seating stands around the arena. The warped surface of the hung roof rises high above the uppermost seats, giving the same height as over the lowest seats. The resulting natural light floods the entire arena area. The parabolic plan is three hundred feet in diameter at its greatest dimension. The arches rise 90 feet into the air and the girt beam at the back of the seating is 35 feet at its greatest height from the ground.

Main entrances to the Stadium are from the sides to the seating stands which hold approximately 5,500 people. Movable chairs on the arena floor hold an additional 4,000. Auxiliary entrances to the Stadium are through doors under the intersection of the arches.

On the ground floor level below the seating stands and lobbies are exhibition areas connected by passages around the sides of the arena. Dressing rooms are on the ground level but reached by stairs from the arena floor. Air heating and circulation equipment, electrical equipment, toilets, offices, and storage rooms are also on ground level. Roof drainage is to the point of arch intersections and is spilled directly into open catch basins. Roof cables are strung between two reinforced concrete arches which form the peripheral ring of the structure in the shape of two intersecting parabolas. These arches withstand the forces produced by the roof under varying load conditions and transmit them directly to the ground.

Wm. Henley Deitrick, Architect;
Matthew Nowicki, Consultant;
Severud-Elstad-Krueger, Consulting Engineers;
Wm. Muirhead Construction Co., General Contractor





Passage Office for K.L.M. Royal Dutch Airlines, Manchester

ARCHITECTS:
HARRY S. FAIRHURST & SON

ALL K.L.M. establishments throughout the world are designed to incorporate certain features which conform to the airlines buildings in Holland. These features include open planning of public spaces, a consistent style of lettering and the use of blue colour.

In other respects the design is not stereotyped and the architect is given freedom to design to suit the particular requirements.

The new Manchester office replaces a

View from public space with baggage bay on left

temporary building and handles bookings, passengers and their luggage in transit and some freight.

The open plan is divided into areas which are designed to provide smooth and unflustered operation of different functions.

An important feature is quick access to and from the building when passengers are embarking or disembarking from coaches with their luggage. The new offices were completed in eleven weeks.

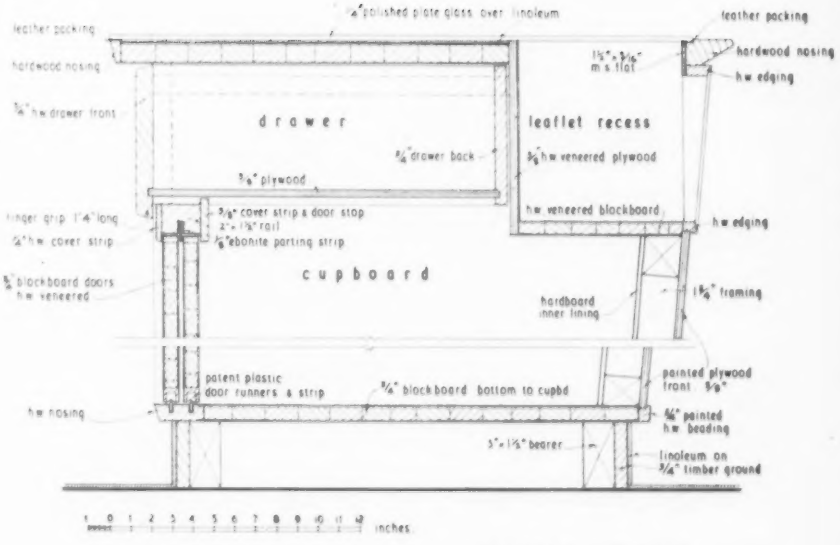
General Contractors

Ground Floor Work and Façade: Harris & Sheldon Ltd.

Basement work: Thomas Scott & Co (Manchester) Ltd.

Sub-contractors :

Electrical Installation: Wm. Anderton & Co. Ltd.
Lighting Fittings and Public Address: Philips Electrical Ltd.
Heating and Ventilating : Saunders & Taylor.
Linoleum Tile Flooring: Pauldens Ltd.
Semastic Tile Flooring: Semtex Ltd.
Reception Office Furniture: Race Furniture Ltd.



detail of counter fitting through leaflet recess.

Information Digest

OFFICIAL PUBLICATIONS

● **British Standard Codes of Practice and British Standard Specifications**, issued by The British Standards Institution, 24/28, Victoria Street, London, S.W.1. Abbey 3333.

British Standard Code of Practice CP.113.201 (1953).—The Structural use of Steel Tubes in Building. Price 5 - post free.

This Code sets out recommendations for the design, fabrication and erection of steel tubes used in any part of a building, either by themselves or in combination with rolled-steel sections. It deals with the quality of materials, permissible stresses and methods of calculation which may be used. It does not apply to steel scaffolding.

In recent years the rapid advances in welding technique have increased the possibilities of using tubes in structural work, and much practical experience has been gained. This Code is mainly concerned with construction having welded connections, and recommendations regarding the types of welded connection and permissible stresses therein are given. It may also be used where other efficient types of connection are employed.

British Standard Code of Practice CP.412 (1953).—Installation of Optical Projection Equipment in Educational Establishments. Price 7/6 post free.

This Code deals with provision and installation of optical projection equipment in schools and other educational establishments, and advises on the choice and location of such equipment. The Code is not applicable where inflammable film is used.

Various types of projection apparatus are described, recommendations being made as to the suitability of each type, and the arrangements required, for use in school halls, lecture theatres and classrooms. The equipment described includes standard lanterns, episcopes, epidiascopes, miniature projectors, projection microscopes, manuscript projectors and combined apparatus.

The quality of reproduction of images on various types of screen (both reflecting and translucent) is assessed. Recommendations deal with positioning, size, protection against dirt, screen brightness and the placing of loudspeakers in relation to screens.

There are also design notes on general lighting and control of daylight, acoustics, and ancillary matters such as seating, ventilation, electricity supply, gangways, and the use of test films. Other notes cover installation work, inspection, testing and maintenance.

The design of a suitable projection trolley and the effect of stray or general light on the projected picture are dealt with in an appendix, and there are ten diagrams illustrating projection arrangements and screen behaviour.

British Standard 1010 (1953).—Draw-off Taps and Stopvalves for Water Services (screw down pattern). Price 6 - post free.

The main object of the present revision was to meet the demand for lighter fittings, and this has been achieved with what is considered to be a minimum disturbance of manufacture by fitting headwork of smaller sizes in normal bodies, thereby enabling most of the existing tools and gauges to be used for the lighter taps and valves.

Opportunity has been taken to clarify points of doubt in the interpretation of some of the clauses, particularly in regard to "rate of flow" restrictors embodied in taps controlling the feed to a water heater or similar apparatus, and the use of interlocking devices.

The standard applies only to the ordinary screw-down type of tap and stop-valve for water services. It is not intended to apply, even in part, to any other types, which are outside the scope of the standard.

As in the previous edition, details have been given for union ends, including those for light-gauge copper tube, until such time as the revision of B.S.864, "Capillary fittings and compression fittings for use with light-gauge copper tube" is available, when amendments making suitable references to the latter will be issued.

Draw-off taps and stop-valves manufactured to this specification may bear the certification marks of the British Standards Institution and the British Waterworks Association under a joint arrangement operated by these two bodies.

British Standard 1579 (1953).—Connectors for Timber. Price 3/6 post free.

This British Standard, which was first published in 1949, has been revised to take account of the types of connectors at present available in this country. Claw plate and malleable cast-iron shear plate connectors have been omitted; thus the revised standard now covers the following types with their appropriate bolts and washers: split-rings, shear plates, round- and square-toothed plates, and corrugated toothed-rings.

British Standard 1968 (1953).—Floats for Ball Valves (Copper). Price 3/6 post free.

This British Standard specifies requirements for copper floats for use with ball valves, and has been issued to facilitate the manufacture—as separate items to be purchaseable as such—of floats suitable for ball valves complying with the requirements of B.S.1212, "Ball Valves ('Portsmouth' type)," and other types of ball valve requiring floats of this description.

Provision has been made for floats to be marked independently of B.S.1212 and with their own B.S. number, and B.S.1212 is being suitably amended in order to make cross-reference between the two standards.

The standard provides for floats, with soldered, brazed, welded, silver-soldered, and solderless joints, and the gauge of metal used in the floats is lighter than that required in the present B.S.1212, as tests have proved that the floats weighing 5 oz instead of 7 oz are quite satisfactory, and result in the saving of copper.

British Standard 1972 (1953).—Polythene Tube for Cold Water Services. Price 3/6 post free.

The standard applies to black polythene tube for use in cold water services and in flush, overflow and warning pipe applications. Two classes of tube are provided for—normal gauge, suitable for connection by means other than screw threading, and heavy gauge, suitable for screw threading.

The standard outlines composition, dimensions with tolerances and methods of test.

The standard also includes an appendix giving notes on the use of polythene tube for cold water services.

British Standard 1973 (1953).—Polythene Tube for General Purposes. Price 4 - post free.

The standard provides for three colours of polythene tube, viz., black, white and natural, each of which is obtainable in three grades of polythene distinguished by the viscosity of the material.

The standard specifies compositional and physical tests and lays down dimensions, limits and test pressures for light tubes, medium tubes, heavy tubes and tubes for screwing. An appendix gives notes on the installation of polythene tube.

● **Road Note No. 15. Road Research Laboratory.**—Specifications for the Construction of Housing Estate Roads using Soil-cement. Issued by H.M.S.O., York House, Kingsway, W.C.2. Price 9d. (by post 10½d).

Road Note No. 15 gives specifications for two methods of constructing soil-cement road bases. One method describes the "mix-in-place" method and the other method employs stationary plant. In addition to the specifications there is a very helpful appendix giving notes for the guidance of engineers.

● **Building Research Station Digest No. 53.** Issued by H.M.S.O., York House, Kingsway, W.C.2, on behalf of the Building Research Station, Garston, Watford, Herts. Price 3d.

Digest No. 53 deals with the subject of perforated clay bricks. It draws attention to the manufacturing advantages of this type of brick and then discusses the properties. It makes clear that for all normal uses perforated bricks have

ample strength, are less in weight, while their behaviour seems to be so similar to solid bricks that the differences may be ignored. The thermal resistance is improved.

OFFICIAL AND TRADE ASSOCIATION PUBLICATIONS

● **The Incorporated Church Building Society. Annual Report 1952.** Published by the Society, 7, Queen Anne's Gate, London, S.W.1. Price 3/6.

In addition to the Report of the Society's work, income and expenditure, there is also a very useful report on the subject of the Dual-purpose Church, which contains recommendations for planning by Leslie N. Moore, M.C., F.R.I.B.A., and is accompanied by a selection of plans and photographs of recent church buildings of this type.

● **The Village Hall Booklet No. 1. The Site and Building.** Published by the National Council of Social Services, 26, Bedford Square, London, W.C.1. Museum 9944. Price 2/-.

The publication is intended to assist those concerned with the provision and management of village halls, including the improvement and extension of existing halls. Detailed notes and planning requirements are given, together with a few illustrations of recent village halls, but without plans. Notes are also given in regard to services, including stage equipment and lighting.

● **Management and the Building of a New Factory. Production Management Series No. 6.** Published by the British Institute of Management, 81 Hill Street, London, W.1. Price 5/-.

This booklet is based on a paper read by Mr. C. W. Glover at a meeting of the British Institute of Management. It discusses in very general terms the whole subject of the planning and building of factories. It is probable that the information contained in this publication is more useful as guidance to factory management than to architects.

● **The Story of Farm Buildings. Young Farmers' Club Booklet No. 27.** Published by Evans Brothers Ltd., Montague House, Russell Square, London, W.C.1, for the National Federation of Young Farmers' Clubs. Price 2/-.

This is a very interesting brief survey of farm buildings from A.D. 500 to the present day.

● **Materials Handling in Industry.** Published by the British Electrical Development Association, 2, Savoy Hill, London, W.C.2. Temple Bar 9434. Price 9/- post free.

The book has been written with the object of showing how better materials handling can increase productivity and improve working conditions. Many kinds of mechanical equipment for general use are illustrated and discussed, together with details of their construction, characteristics and duties.

The types of equipment are not confined to electrically driven or controlled appliances.

There is a very great deal of helpful information in this publication which appears to be more comprehensive in regard to the field reviewed than other books on the subject.

● **Journal of the Institution of Heating and Ventilating Engineers. Vol. 21. No. 213.** Published by the Institution of Heating and Ventilating Engineers, 75, Eaton Place, London, S.W.1.

Apart from the usual Institute matters this issue contains an extensive paper on gas-fired central-heating units and conversions. The paper is well illustrated by means of photographs and diagrams and gives very helpful information.

● **The Builders' Reference Book, Second Edition.** Published by H. O. Quinn Ltd., 151, Fleet Street, London, E.C.4. Price 5/-.

This second edition has been very considerably revised and greatly enlarged. It contains a large amount of information which should be useful both to architects and the building industry for reference.

● **Design of Constructional Welded Details, by F. H. Abrahams.** Published by the Association of Engineering and Shipbuilding Draughtsmen, Onslow Hall, Little Green, Richmond, Surrey. Price 3/-.

The booklet gives, first, general notes on welding, and secondly, information regarding the design of details, together with a short but very useful bibliography. The booklet is well illustrated and the calculations are easy to follow.

● **Bracknell New Town. An Introduction to the Draft Master Plan.** Issued by the Bracknell Development Corporation, Forley Hall, Binfield, Bracknell, Berks. Free.

This publication is a brief outline of the attractions of this new town and sets out the general intentions of the Corporation.

● **Twenty-fifth Anniversary Bulletin.** Published by the British Cast Concrete Federation, 17, Amhurst Road, Ealing, W.13. Free.

A forty-five page duplicated summary setting out the development of precast concrete. The survey makes interesting reading and is presented under fourteen main groupings of products, such as walling blocks, floor beams, roof tiles, fencing, kerbs and flags, lighting columns and precast concrete in agriculture. An appendix gives a list of the British Standard Specifications applicable to this type of manufacture and B.R.S. Note No. E.424 on light weight concrete blocks for housing is also incorporated as an appendix.

TRADE PUBLICATIONS

● **Specifications for Wall Paper.** Published by the Wall Paper Manufacturers Ltd., Kings House, King Street West, Manchester 3. Free.

This publication contains some very useful information on the preparation of surfaces to receive wallpaper in addition to general information concerning the different types of wallpapers. The publication is of the same size as a British Standard Specification.

● **Alkathene Tube.** Issued by Imperial Chemical Industries Ltd., Plastics Division, Welwyn Garden City, Herts. Free.

This publication sets out recommended practice in the use of this type of polythene tubing for cold water purposes. It stresses the types and sizes of tube, the methods of cutting and methods of jointing. It is a very well produced publication with clear diagrams and photographs.

It is a pity that this very useful publication does not comply with the recommended sizes in B.S.1311 as it is one which many users will wish to retain.

● **Raylux Commercial Tungsten Lighting Fittings.** Issued by Hume Atkins & Co. Ltd., 66, Victoria Street, London, S.W.1. Free.

This publication sets out a very wide range of electric lighting fittings. The information necessary for the users is clearly displayed.

● **Reeded Glasses.** Issued by Chance Bros. Ltd., Smethwick, 40, Birmingham. Free.

This publication illustrates the six types of reeded glasses, together with the sizes and thicknesses available. A number of well-chosen illustrations show some examples of the possibilities of this type of glass for decorative uses.

● **Imperial Porcelain Sanitary Equipment.** Issued by the Leeds Fireclay Co. Ltd., Wortley, Leeds 12. Free.

Catalogue K. gives a wide range of fittings suitable for domestic, industrial, school and hospital uses. Each fitting is illustrated with a photograph and a fully dimensioned diagram. It would be very helpful to know if "imperial porcelain" really means fireclay.

● **"Paramount" Dry Partition.** Issued by British Plasterboard Ltd., Morris House, 1/5 Jermyn Street, London, S.W.1. Free.

Full information is given of a new type of lightweight dry partition available in two thicknesses and in standard lengths of 7ft 6in and 8ft and in a width of 3ft, although certain other sizes can be specially made. Information is given concerning the weight, modulus of rupture, sound insulation, and thermal transmission. A fire-resistance report from the Fire Research Station is also included. Details of methods of application are given.

[Continued on page 26

● **Consumers Services' Units.** Issued by British Insulated Callender's Cables Ltd., 21, Bloomsbury Street, London, London, W.C.1. Free.

A well-prepared booklet giving full information of well-designed consumers' service units for various types of installation. The catalogue is extremely well produced and includes a very interesting presentation of a typical unit by means of printing on four cellophane sheets, fitting over one another, which by lifting discloses the full details of the construction.

● **" Casco " Nailable Floor Joists.** Issued by the Cambridge Artificial Stone Co. Ltd., Corporation Sidings, Mill Road, Cambridge. Free.

Describes a type of concrete joist designed to allow for the direct fixing of wooden floor boards. They are designed in a standard section of 8¼in × 4½in, which are suitable for spans up to 14ft 3in when used at 18in centres. The company also markets a range of other floor joists in two standard sizes, 6¾in × 4½in and 8¼in × 4½in.

● **New Defences against Corrosive Attack.** Issued by Semtex Ltd., Semtex House, The Broadway, Welsh Harp, London, N.W.9. Free.

The publication draws attention to a series of Semtex special cements, namely, latex cement, plastic cement, silica cement, resin cement and sulphur cement, and to their various applications to avoid corrosive attack. The information is very well presented.

● **Copper Tubes for Gas Services.** Issued by Imperial Chemical Industries Ltd., Imperial Chemical House, Millbank, London, S.W.1. Free.

A small very well-presented booklet drawing attention to the types of copper tubing conforming to various British Standard Specifications, particularly suitable for gas installations. Attention is also drawn to a range of capillary and compression fittings for the gas industry made by Fyffe & Co., Ltd., a subsidiary of I.C.I. The booklet complies with the recommendations of B.S.1311.

● **Welded Plate Girders and Portal Frame Formulae.** Issued by the Quasi Arc Co. Ltd., Bilston, Staffordshire. Free.

These two small publications set out very clearly design information on these two subjects and should be found to be very helpful to designers. The publications conform with the size recommended in B.S.1311.

● **" Kynal " and " Kynalcore " Wrought Aluminium Alloys.** Issued by Imperial Chemical Industries Ltd., Imperial Chemical House, Millbank, London, S.W.1. Free.

This booklet provides, in tabular form, technical data on the company's ranges of alloys. The information is presented in a comprehensive form for reference in a publication which complies with the recommendations of B.S.1311. It is a particularly useful document for retention as the range of materials is very wide and the applications of these many alloys demand constant reference.

● **" Kynal " Solders and " Kynal " Flux for Soldering Aluminium.** Issued by Imperial Chemical Industries Ltd., Imperial Chemical House, Millbank London, S.W.1. Free.

This small booklet draws attention to three grades of soldering material for aluminium for which detailed information of the properties are given and also a suitable soldering flux for use with these solders. Some illustrations of typical joints are given and information on the techniques used and on the properties of soldered joints. This document complies with the recommendations of B.S.1311.

● **Cascamite " One Shot " Glue.** Issued by Leicester, Lovell & Co. Ltd., North Baddesley, Southampton. Free.

The booklet draws attention to a new synthetic resin material which has only been available in America until recently. It is noted that this glue is particularly useful for large surfaces as no heat is necessary during or after use. It is also useful for veneering as it is non-staining even with acid timber such as oak or mahogany.

● **Floor Queries.** Issued by Wheatly & Co. Ltd. Springfield Tileries, Trent Vale, Stoke-on-Trent, Free.

A very nicely prepared brochure describing the complete procedure in the manufacturing of clay quarry tiles. Each step in the process is illustrated with admirable photographs.

● **Cast Iron Gutters.** Issued by Federated Foundries Ltd., 75, Hawthorn Street, Glasgow, N. Free.

A booklet, mostly in colour, illustrating the change from the traditional process of casting rainwater gutters in sand boxes to the new method of mechanical production. This booklet makes very clear that standardized production on a vast scale is an essential component of such a method of manufacture.

● **The 126th edition of Laxton's Builders' Price Book** is now available (dated 1953), edited by P. T. Walters, F.R.I.C.S. ; publishers Kelly's Directories Ltd., 186, Strand, London, W.C.2. The price is 30/- nett.

The whole of the prices in this edition have been analysed afresh in the light of present-day conditions and a considerable amount of additional information has been incorporated.

The basis upon which the prices are built up is explained in the Preliminary and General Section which also includes data for assessing the value of some of those expenses which vary with the nature of the Contract and situation of the Site and therefore are not normally included in the unit prices. As far as wages are concerned, the prices are based on the rates which came into force in February, 1953.

Each Trade or major group of prices is preceded by the basic prices of materials upon which they are calculated to facilitate adjustments arising from variations in the cost of materials.

Percentages have been given at the end of each group of prices representing the effect of a penny variation in the basic wage rate, thus prices can be adjusted for wage grades other than London or for any revisions that may come into operation during the currency of this edition.

The current wage rates and gradings for most towns are given with relevant extracts from the London Working Rule Agreement and the latest National Schedule of Daywork Charges, Professional Scales of Fees and Charges and other useful data and memoranda are included as usual.

An important part of the book containing 272 pages is the list of brands and trade names printed on blue paper for ease of reference and containing over 11,000 items, together with a separate alphabetical list of names and addresses, etc., of firms connected therewith.

ALSO RECEIVED

● **Aquaseal Roofing Service.** Issued by Berry Wiggins & Co. Ltd., Field House, Breams Buildings, Fetter Lane, London, E.C.4. Free.

● **Permadek Insulating Steel Roof Decking.** Issued by Messrs. Permanite Ltd., 455, Old Ford Road, London, E.3. Free.

● **33rd Annual Report of the Non-Ferrous Metals Research Association**, Euston Street, London, N.W.1. Free.

● **Easiform and the Housing Drive.** Issued by John Laing & Sons Ltd., Mill Hill, London, N.W.7. Free.

● **Fabricating Modern Pressure Vessels.** Issued by G. A. Harvey & Co. Ltd., Woolwich Road, London, S.E.7. Free.

● **Draught Exclusion.** Issued by British Hermeseal Ltd., 4, Park Lane, London, W.1. Free.

● **Cape Asbestos 1893-1953.** Issued by Cape Asbestos Co. Ltd., 112-116 Park Street, London, W.1. Free.

● **Annual Report 1952.** Coal Utilization Council, 3, Upper Belgrave Street, London, S.W.1. Free.

● **85th Annual Report of the Council.** Royal Institution of Chartered Surveyors, 12, Gt. George Street, London, S.W.1. Free.

● **Yearbook, 1953.** National Smoke Abatement Society, Chandos House, Buckingham Gate, Westminster, S.W.1. Price 1/-.

● **19th Annual Report, 1952.** Timber Development Association Ltd., 21, College Hill, London, E.C.4.

● **Gates of Distinction.** Issued by Kemp Metal Products Ltd., 407a, Brighton Road, South Croydon, Surrey. Free.

The opening years of the nineteenth century saw the beginning of mechanical invention, philosophic teaching, romantic novels, poetry and political forces that were to change the pace and face of the world. All this ferment of thought and action was reflected in the new furnishings of the time, now popularly known as English Regency, after the Prince who became Regent for George III. The colour of the Semastic Decorative Tile illustrated is a cream used in much of the Regency furnishings, now standardised by the British Colour Council who collaborated in the selection of colours for both Semtex Vinyl and Semastic Decorative Tiles. Architects will find that this dual range offers them the widest possible scope for colourful decorative schemes to satisfy both æsthetic and practical considerations.

One of the eighteen plain and marbled colours in the Semastic Decorative Tile range.

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and
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products of a Dunlop Company

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Semtex Ltd
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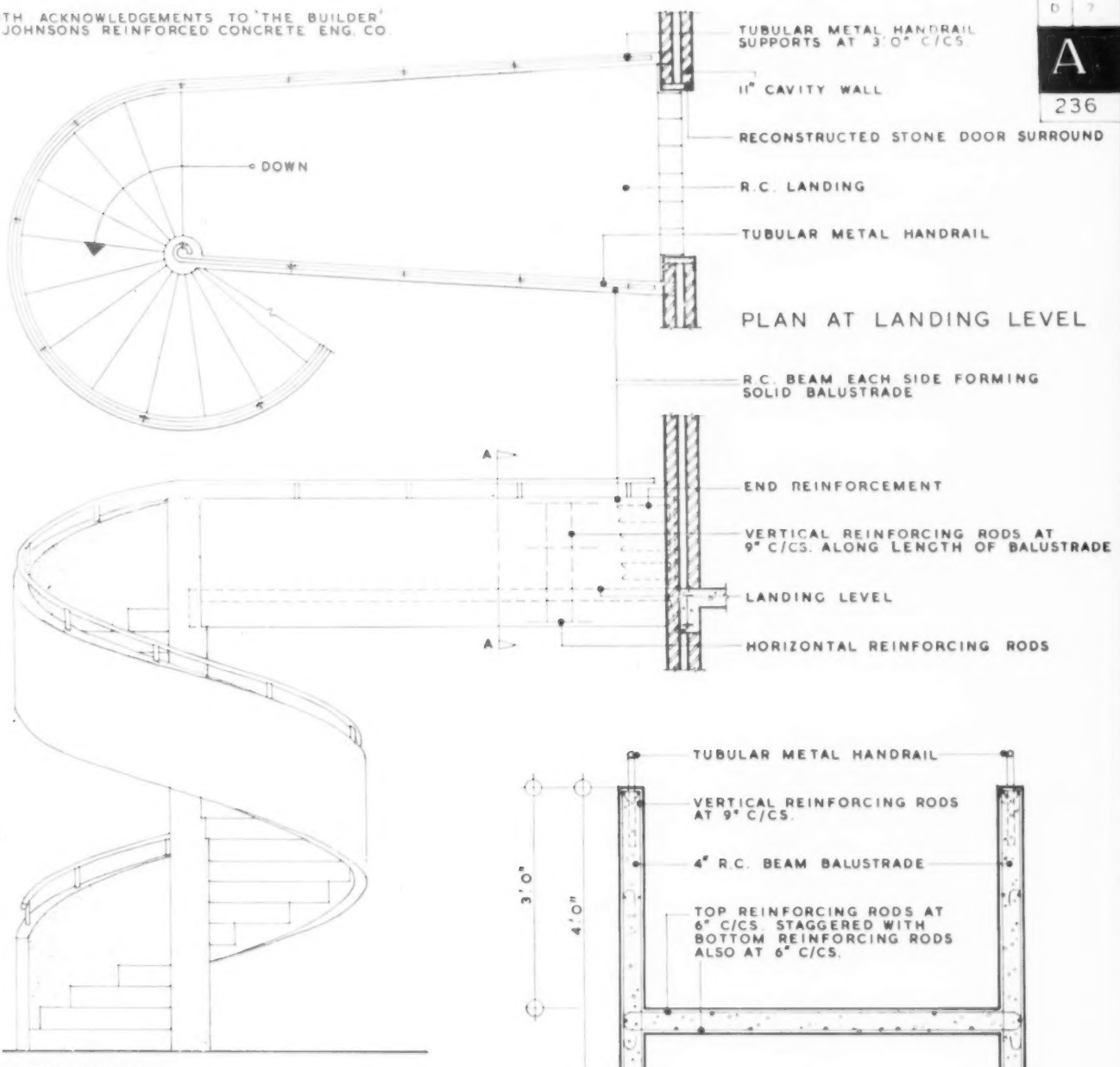
The Limmer & Trinidad Lake Asphalt Co. Ltd
The Western Trinidad Lake Asphalt Co. Ltd

158/L.7

WITH ACKNOWLEDGEMENTS TO 'THE BUILDER' & JOHNSONS REINFORCED CONCRETE ENG. CO.



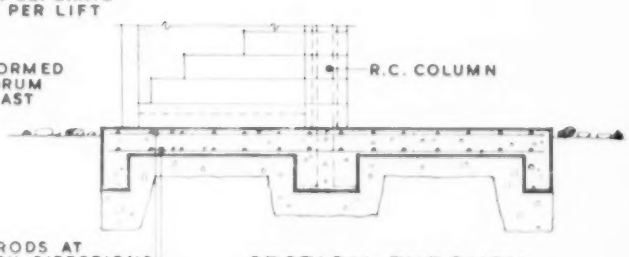
ELEVATION

SECTION A-A

PRECAST STEPS PLACED IN POSITION IN SEPERATE LIFTS OF FOUR PER LIFT

R.C. COLUMN FORMED IN CIRCULAR DRUM MADE BY PRECAST STEP UNITS

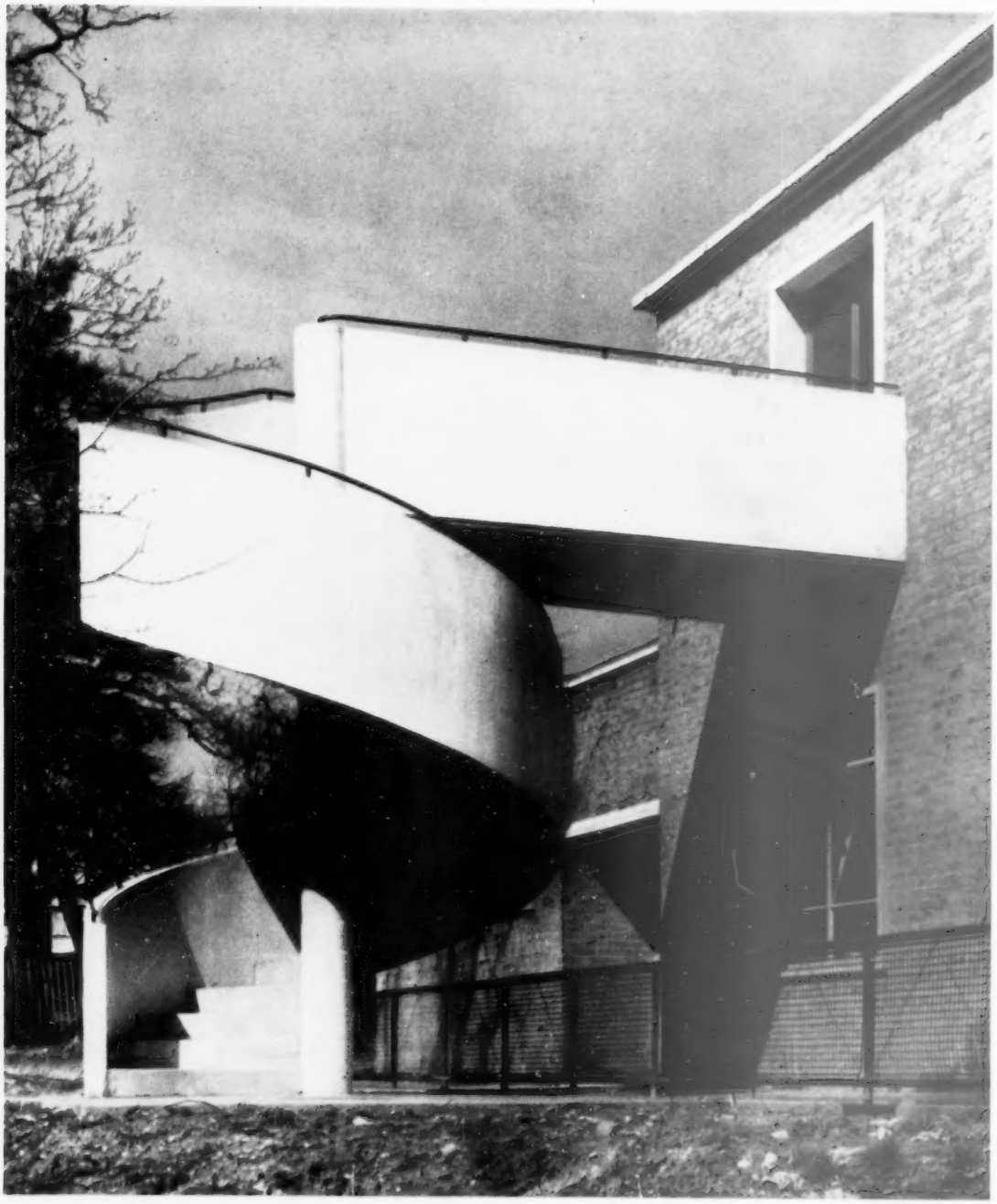
REINFORCING RODS AT 9" C/CS. IN BOTH DIRECTIONS AT TOP AND BOTTOM OF BASE SLAB



SECTION THROUGH BASE SLAB

PLAN OF BASE SLAB AND POSITIONING OF FIRST STEP SCALE: 1" = 4'0"

CONCRETE SPIRAL STAIRCASE, LUCTON SECONDARY SCHOOL, LOUGHTON, ESSEX • H. CONOLLY COUNTY ARCHITECT



CONCRETE SPIRAL STAIRCASE, LUCTON SCHOOL, ESSEX
ARCHITECT : H. CONOLLY

Factory-made Concrete

A RUMOUR has reached me that the Council for Codes of Practice, through the Institution of Structural Engineers, is commencing the preparation of a Code of Practice for factory-made concrete units, as some people feel that increased stresses and even reduced cover over the reinforcement might be permitted when products are made under conditions which are, at least in theory, better than those that prevail for *in situ* casting of concrete.

I think this may be a good idea, and I am pleased to hear it is being pursued, but I foresee the responsible committee having to overcome many troubles if they are to ensure that the products are, in fact, so much better that relaxations can be permitted to the requirements of CP.114, the Code of Practice for Normal Reinforced Concrete, which is now so widely used for controlling concrete work.

First, it will be necessary to decide what constitutes a "factory," as many precast concrete works that I know could hardly be designated factories in the sense that I imagine the majority of the committee would have in mind. Even many of the better factories seem to find it necessary to cast some of their larger units in the open air, or at least in the semi-open air. I assume the sponsors of the idea mean a fully enclosed building in which the temperature can be maintained within reasonable limits, and certainly at least at 50 deg F or more. Some cast-concrete works have conditions which are very little different from those on any well-controlled construction site.

Secondly, I assume the sponsors will have in mind that factory conditions mean having sufficient covered space in which to "cure" the products for long enough to gain adequate strength for handling and transport, and perhaps to ensure that after "curing" the products have dried out adequately. Personally, I know very few pre-cast concrete works which have covered space in which to store more than one or two days' output, which many engineers will probably consider to be insufficient to achieve the quality of work necessary to justify relaxations in requirements.

I wonder also what conditions of storage of materials and control of both materials and mixing will be called for, as it is factors of this nature that make the essential differences between good and less good quality products. For example, aggregate may need heating in cold weather unless the storage is inside heated buildings. Furthermore, the quality of the cement used varies considerably from delivery to delivery, and although it frequently exceeds greatly the requirements of B.S.12, on other occasions it is only little over the minimum quality demanded; this is a situation which, I am assured, at least at present, cannot be avoided owing to variability of the quality of the fuel delivered to cement works, thus all deliveries need to be carefully tested before use unless all mixes are based on the minimum quality available over a long period. It is a pity cement cannot be tested at works and sold in, say, two or even three strength grades, as this would permit of more economic use.

I think one may assume that it is easier to space reinforcement more accurately under factory conditions, but judging by some of the examples one sees delivered from what may be termed factories, it does not necessarily work out in practice that they are any better than units produced by other means unless one chooses very carefully those manufacturers who are known for the careful control of their output. However, I still question whether because an article is made in a factory it is right to assume that proper cover has always been achieved; with the recently perfected instruments the amount of cover can now be assessed fairly accurately but it necessitates a great deal of checking. Nonetheless, even with really accurate cover it seems somewhat questionable whether there is justification in permitting any considerable reduction of the amounts of cover where the work is to be exposed to exterior weather conditions or the cover is designed to meet fire-risk requirements. Many works now seem to depend on ½in of cover over the main reinforcement, and this, in fact, may mean as little as ¼in over any metal, which I believe is too little to be satisfactory. I think 1in over the main reinforcement should be the minimum to be sure of a reliable product.

If we are to relax requirements in favour of factory-made units, it would seem that any code produced will have to lay down very stringent conditions to control manufacture; such conditions might so easily cause restrictions which might prove to be more of a hindrance than the helpfulness desired by those who advocate such a code. It leads me to think that there might be greater benefit by the preparation of rather more B.S. for pre-cast concrete products, such as floor beams, rather than to prepare a general code. There is already quite a range of B.S. for pre-cast concrete products which, judging by recent drafts for comment, may be increased in the future. An interesting fact noticeable in the B.S. for a number of these products is the adoption of proof tests as the basis for acceptance which appears to eliminate the need to detail exactly how the actual process of manufacture is carried out. If proof tests on normal production are carried out as a matter of routine in the factory, and these tests are recorded, it seems to me that the purchasers should have a fairly good guide to the quality of the products turned out by any particular firm. The several B.S. seem to show some variation in proportion of articles to be proof-tested, but if the buyer has the right to select, at his own choice, random specimens for test, the manufacturer must of necessity keep a close watch on his whole production to make sure that none falls below the permitted requirements. This strikes me as a very fair way to give reasonable freedom for the ingenuity of the producer but at the same time reasonable safeguards to the user.

From the work B.S.I. has already carried through, it would seem that it might be possible to prepare a B.S. for methods of proof-testing finished precast concrete products which could be adopted in the suggested code. Tests to destruction are very wasteful of both time and materials, and do not seem to provide the user with such good guidance as is available as a result of proof-testing a greater number of samples, although as an ultimate or referee test it may be necessary from time to time to test articles to destruction. The use of proof-tests involves agreement as to the amount of load which should be applied so as to give adequate guarantees of quality without harming the product; opinions on the amount of these loads for proof-tests seem to vary greatly, thus agreement through B.S.I. might be very advantageous to both manufacturers and users. Certainly the pre-casting of concrete seems to be increasing very rapidly, thus the existence of more codes and standards related to this method of using concrete for the guidance of all would be helpful in order to maintain a high standard of quality both as regards the material and the workmanship, as any fall in these directions might so easily damage the reputation of the industry and the reputable makers therein. I have already heard of users who are giving up the use of concrete fence posts owing to unfortunate experiences.

DUTCH UNCLE

B.A.T.C. Scholarship Awards for 1953

Four scholarships to apprentices in the building industry have been awarded under the Building Apprenticeship and Training Council Scheme. The scholarships are tenable for three years for degree courses at Manchester, Cardiff or Leeds Universities, or for Higher National Diploma courses at various Technical Colleges throughout the country. The grants cover fees, examination expenses, and maintenance allowances.

The winners are: L. J. Chapman, 21-year-old apprentice plumber of Ashingdon, Essex. D. Dodd, 18-year-old apprentice bricklayer of Cottingham, Leics. E. W. Tanner, 20-year-old apprentice bricklayer of London, S.E.18. N. Williams, 25-year-old craftsman plumber (ex B.A.T.C. apprentice), of London, W.11.

MOSAICS

PLANT
HANDTOOLS
E3/23

The efficient and permanent earth continuity which is a hallmark of all good conduit installations is not always easy to achieve owing to the difficulty of cleaning contact surfaces and of securing and tightening the male and female bushes used in looping boxes and adaptable boxes. Four special tools have therefore been designed by The General Electric Co. Ltd., Magnet House, Kingsway, W.C.2, to facilitate these operations. Three of these are available as a set, priced at **£3 9s 4d**, comprising a surface cutting tool, double-ended spanner and ring bush securing tool. They can also be bought separately. For all four tools British Registered Design has been applied for. The illustration shows the special surface cutting tool which has been designed to cut away the enamel surface around ⅝in. and ¾in. clearance holes in conduit boxes. It is of cadmium-plated mild steel, with a cast steel surface cutter, ⅜in. projecting spigot, and knob handle. The handle is recessed to accommodate a ½in. ferrule for fitting over a ⅜in. spigot when used in ¾in. clearance holes. Price **£1 9s** each.

SERVICES
ELECTRIC ACCESSORIES
B5/21

Electrothermal Engineering Ltd., 270 Neville Road, London, E.7, produce this 3-light switch called the DIMMA. Designed principally to control the light from standard and table lamps, it can also be connected with such things as electric blankets or any other piece of electric apparatus which would benefit from control of current. The current is cut by the simple movement of a button by one third and two thirds and includes both full on and off positions. The DIMMA 3-light switch is made for two ranges: CAT. No. DD 101 25w.-60w. CAT. No. DD 102 75w.-100w.

PLANT
HANDTOOLS
E3/24

The "Flash Hammer," a rivet gun by Condrugs Ltd., 67-73, Worship Street, E.C.2, is one of the latest types available. The following characteristics, some of which are unique, are of interest. 1 Four interchangeable barrels can be supplied for each gun, enabling a very full range of rivets and bolts to be fired. 2. The bolts can be supplied with Whitworth threads. 3. The bolt and rivet heads are enclosed in plastic for a close fit in the barrel, and to prevent wear of the barrel on firing. These plastic heads disintegrate on leaving the barrel when fired. 4. Each size of barrel has a coloured ring painted on it and the plastic rivet heads are similarly coloured. This makes the matching of bolt to barrel foolproof. 5. There are three foolproof safety devices to prevent accidental discharge. 6. The gun with one barrel complete in box with tools, etc., is only £27 10s; extra barrels £3 each.

The gun drives a diversity of bolts, screws, nails, etc., of varying diameters into concrete, brickwork, steel, etc.

SERVICES
ELECTRIC ACCESSORIES
B5/22

The new Chilton Universal Shaver Socket provides a convenient means of operating electric shavers of British, Continental and American design without the need for multiple adaptors and resistances.

The outlets are for standard British 5 amp., 2-pin plug at 230 volts: Continental 6 amp., 2-pin plug at 230, 165 and 110 volts, and American flat 2-pin at 110-volts. It is intended to be fitted at a convenient height near a mirror, and it can be flush or surface mounted. Only connection to the mains supply is necessary. It is designed for shavers or appliances taking not more than 20 watts.

The shaver socket incorporates an auto-transformer (A.C. types only) protected by a standard type glass cartridge fuse. A switch of the QMB type is fitted to enable the transformer to be switched off when the socket is not in use. Switching off is desirable, but no damage or undue heating can occur should the socket be left on indefinitely on no-load.

The Universal Shaver Socket will be marketed in three different models: Type No. 1 with an input of 200-250 v. A.C. for the British home market. Type No. 2 with an input of 165 v. A.C. for Italy only. Type No. 3 with an input of 100-120 v. A.C. for Canada, U.S.A. and the European continent.

Produced by Chilton Electric Products Ltd., 5, New Bridge Street, Ludgate Circus, London, E.C.4.

INDUSTRIAL NOTES

● Sir Graham Cunningham, Chairman and Managing Director of the Triplex Safety Glass Co., Ltd., of Birmingham, Willesden and London, has been elected to the Livery of the Worshipful Company of Glaziers and Painters of Glass.

Sir Graham is also Chairman of James Powell & Sons (Whitefriars), Ltd., of Wealdstone, makers of stained glass and table glassware.

* * *

● The Minister of Housing and Local Government is advised by the makers of cast-iron pipes that because of increased production there has been a considerable shortening of delivery periods for the smaller ranges of pipes (particularly 3in).

Authorities were asked in paragraph 3 of Circular 178/48, when ordering pipes, to attach a certificate that the scheme to which the order related had been authorized by the Department, and to refrain from seeking priority in deliveries relating to work not subject to authorization. In view of the improvement in the supply position the Minister has agreed with the makers that a certificate is not now required for orders for pipes up to a value of £500. Paragraph 3 of Circular 178/48 (as amended by memorandum dated April 25, 1950) is amended accordingly.

* * *

● The Royal Air Force is looking for skilled technicians for duty with the Air-field Construction Branch and is accepting applicants direct from civil life, including ex-airmen.

Some of the vacancies are for the post of Clerk of Works, whose duties are mainly those of supervising all new and maintenance works at R.A.F. Stations or sites at home or overseas, controlling and distributing labour and preparing simple schemes, plans and estimates for minor new works services. Other vacancies are for Works Supervisors, whose duties are similar to, but carry slightly less authority and responsibility than, a Clerk of Works. Qualifications required in each case are: Ordinary National Certificate in Building, or Intermediate City and Guilds Certificate in a Craft, or First Class Certificate of the Worshipful Company of Carpenters in Building Construction and Sanitary Science, or equivalent or better qualifications.

Application for these posts can be made at any R.A.F. recruiting office. Candidates with the necessary qualifications will attend for interview at R.A.F. Station Church Lawford, Warwickshire. Those accepted will be required to enlist for five years' regular service and four years' reserve service, or ten years' and two years' reserve, or twelve years' regular service. Age limit for enlistment is 45 for those without previous R.A.F. service.

* * *

● The partnership subsisting between Messrs. Ronald Homes and E. Cooke-Yarborough, under the style of Cone Fittings Co., has been incorporated into a limited company.

This company will receive all debts and pay all liabilities on behalf of the partnership, and will undertake all transactions as from the date of this letter.

The company has acquired larger premises and their address is at 9, Rosemont Road, Hampstead, London, N.W.3 ('phone: Ham. 6618).

CONTRACT • NEWS •

Notes below give basic data of contracts open under locality and authority which are in bold type. References indicate: (a) type of work, (b) address for application. Where no town is stated in the address it is the same as the locality given in the heading, (c) deposit, (d) last date for application, (e) last date and time for submission of tenders. Full details of contracts marked ★ are given in the advertisement section.

OPEN

BUILDING

ALDRIDGE U.C. (a) 76 houses, Pelsall Wood. (b) Engineer and Surveyor, Council Offices, Daw End, Rushall, Walsall, Staffs. (c) 2gns. (e) July 16.

* * *

BEDFORDSHIRE E.C. (a) Secondary school at Sandy. (b) County Architect, County Hall, Bedford; with evidence that applicants are in a position to undertake this type of contract. (d) July 4.

* * *

BOOTLE B.C. (a) 30 and 32 houses, Netherton site. (b) Borough Surveyor, Town Hall. (c) 2gns. (e) July 15.

* * *

BOURNEMOUTH B.C. (a) Contract W.H.16. 4 blocks of 4 flats, West Howe Estate. (b) Borough Architect (Room 106), Town Hall. (c) 2gns. (e) July 14.

* * *

BOURNEMOUTH B.C. (a) Adaptations to sun lounge, with 6 bedrooms above, at "The Fearnes," 26 and 28, Knyveton Road. (b) Borough Architect (Room 106), Town Hall. (c) 1gn. (e) July 10.

* * *

BRIDGWATER B.C. (a) 12 houses at Brendon Road and 4 houses at Kent Avenue. (b) Borough Architect, Town Hall; stating that an adequate labour force is available for completion of contract. (c) 2gns. (e) July 15.

* * *

***BRIGHTON B.C.** (a) 186 houses for Sections 5, 6 and 7, Woodingdean Estate. (b) Borough Engineer, 26-30, Kings Road. (c) 2gns. (e) July 28. See page 32.

* * *

BRISTOL E.C. (a) Adaptation for provision of technical college accommodation by conversion of Block No. 1, Muller's Orphan Homes, Ashley Down. (b) Chief Education Officer, The Council House, College Green, 1. (c) 2gns cheque payable to Corporation. (d) July 8. (e) Aug. 20.

* * *

BUCKS C.C. (a) Infants' and junior schools at Farnham Royal, Slough. (b) County Architect, County Offices, Walton Street, Aylesbury. (c) 5gns. (d) July 6. (e) Sept. 28.

* * *

CHESTER R.C. (a) 8 houses, Thornton-le-Moors. (b) T. C. R. Eaton, 16, White Friars. (c) 3gns payable to Council. (e) July 13.

* * *

DOCKING R.C. (a) 4 pairs of houses and 2 pairs of bungalows, Mill Lane, Syderstone, Norfolk. (b) G. E. Gibson, Council Offices, Docking, King's Lynn. (c) 2gns. (e) July 14.

* * *

***DODWORTH U.C.** (a) 72 houses, South Road site No. 2. (b) Messrs. Howard and Benson, 88, Mosley Street, Manchester, 2. (c) 2gns. (e) July 20. See page 32.

* * *

DONCASTER B.C. (a) (Contract 425) 36 garages at Cantley, (Contract 426) 93 dwellings with site work and services, (Contract 427) 104 dwellings with site works and services. (b) Borough Architect's Office, 15, South Parade. (c) (Contract 425) 1gn and (Contracts 426, 427) 2gns each. (e) July 15.

* * *

DURHAM C.C. (a) 1 house and office and 1 pair of houses for police at Birch Crescent, Burnopfield. (b) Police Authority Architect, Court Lane. (d) July 9.

DURHAM COUNTY POLICE AUTHORITY (a) 1 pair of police houses with office at Low Westwood, Hamsterley Colliery. (b) Police Authority Architect, Court Lane. (d) July 9.

• • •

DURHAM COUNTY POLICE AUTHORITY. (a) 2 pairs and 1 house for police at Gray Avenue, Sherburn Village Estate. (b) Police Authority Architect, Court Lane. (d) July 9.

• • •

DURHAM COUNTY POLICE AUTHORITY. (a) 1 house with office, for police, at The Crescent, Egglescliffe. (b) Police Authority Architect, Court Lane. (d) July 9.

• • •

EASINGTON R.C. (a) 2 public conveniences at Crimdon Park, Co. Durham. (b) Engineer and Surveyor, Council Offices. (c) 1gn. (e) July 14.

• • •

EAST RIDING C.C. (a) 1 pair of police houses and 1 garage at Molescroft, Beverley. (b) County Architect, County Hall, Beverley. (c) £2. (e) July 13.

• • •

ECCLES B.C. (a) (Contract A) 102 dwellings, (Contract B) 146 dwellings and (Contract C) 58 dwellings, Brookhouse Estate. (b) Borough Engineer, Town Hall Annexe, Irwell Place. (c) 2gns each contract. (d) July 14.

• • •

ESSEX C.C. (a) (1) Great Baddow junior school (approx. value of contract £50,000), (2) Brentwood Pilgrims Hatch junior school (approx. value of contract £50,000), (3) Harlow Little Parndon and Hare Street No. 1 junior and infants' school (approx. value of contract £80,000). (b) County Architect, County Hall, Chelmsford; with full details. (d) July 4.

• • •

GRANTHAM B.C. (a) 24 pairs of houses. (b) Borough Engineer, Guildhall. (c) 2gns. (e) July 22.

• • •

GREAT YARMOUTH B.C. (a) 72 flats and maisonettes at Phase 4 for the Middlegate Street area. (d) Borough Engineer's Architect's Office, 8a, Queen Street. (e) July 13.

• • •

HAMPSHIRE POLICE AUTHORITY. (a) Police house at Victoria Road, Netley, near Southampton. (b) County Architect, The Castle, Winchester. (c) 1gn cheque payable to Treasurer of Hampshire Police Fund. (d) July 8.

• • •

HEMEL HEMPSTEAD B.C. (a) 58 houses and 4 garages, Warners End. (b) Borough Engineers, Market Square. (c) July 27.

• • •

HORNCHURCH U.C. (a) 48 houses in 3 contracts, Front Lane, Cranham. (b) Council's Surveyor, Council Offices. (c) 2gns. (e) July 18.

• • •

LICHFIELD C.C. (a) 72 dwellings, Wheel Lane Estate. (b) City Engineer, Guildhall. (c) 2gns crossed cheque payable to Council. (e) July 11.

• • •

LONDON—WOOD GREEN B.C. (a) 21 flats, Eldon Road, N.22. (b) Borough Engineer, Town Hall, N.22. (c) 2gns to Borough Treasurer. (e) July 22.

• • •

LOUTH B.C. (a) Demolition of existing cottage-type properties and erection of block of 18 flats at Springside, Louth. (b) Town Clerk, Town Hall. (c) 2gns. (e) July 14.

• • •

NORTON R.C. (a) Public conveniences at Church Street. (b) F. Vaux, 31, Quay Road, Bridlington. (c) 1gn. (e) July 13.

NEWCASTLE-UPON-TYNE E.C. (a) Supply and partial erection of steel work for primary school at Stocksfield Avenue. (b) Director of Education, City Education Office, Northumberland Road, 1. (c) 2gns cheque payable to Education Committee. (d) July 10. (e) Aug. 20.

• • •

NEWCASTLE-UPON-TYNE E.C. (a) Primary school at Stocksfield Avenue. (b) Director of Education, City Education Office, Northumberland Road, 1. (c) 2gns cheque payable to Education Committee. (d) July 10. (e) Aug. 20.

• • •

N. IRELAND—NORTHERN IRELAND FIRE AUTHORITY. (a) Fire station at Dervock Road, Ballymoney. (b) Secretary, Northern Ireland Fire Authority, 43, Castle Street, Lisburn. (c) 5gns. (e) July 10.

• • •

NORMANTON U.C. (a) Conversion of York House, off Church Lane, Normanton, into 2 houses. (b) Council's Surveyor, Town Hall. (e) July 11.

• • •

NORTHAMPTONSHIRE C.C. (a) Conversion of wards at Glapthorn Road Hospital, Oundle. (b) County Architect, County Hall, Northampton. (d) July 7.

• • •

NORTHAMPTONSHIRE C.C. (a) Erection of house and alterations to farm buildings at Rectory Farm, Wootton. (b) County Architect, County Hall, Northampton. (d) July 7.

• • •

OLDHAM B.C. (a) Infants' school at Fittons Hill Estate. (b) Schools Architect, Education Offices, Union Street West. (c) 2gns. (e) July 11.

• • •

OLDHAM B.C. (a) 44 bungalows, Holts Estate. (b) Messrs. Cameron and Middleton, 21, Queen Street. (c) 2gns. (e) July 13.

• • •

PRESTON B.C. (a) Health clinic at Saul Street. (b) Borough Engineer, Municipal Building. (c) 2gns. (e) July 14.

• • •

SOUTH SHIELDS B.C. (a) Public conveniences at Green Lane West. (b) Borough Engineer, Town Hall. (c) 2gns. (e) July 14.

• • •

SOUTH SHIELDS B.C. (a) Public conveniences at Marsden Grotto trolley bus terminus. (b) Borough Engineer, Town Hall. (c) 2gns. (e) July 14.

• • •

SOUTH WESTERN REGIONAL HOSPITAL BOARD. (a) X-ray department at Exeter City Hospital. (b) Regional Architect, South Western Regional Hospital Board, 27, Tyndalls Park Road, Bristol 8. (c) 2gns. (d) July 4.

• • •

TYNEMOUTH B.C. (a) Public conveniences and enquiry office at Northumberland Square, North Shields. (b) Borough Surveyor, 16, Northumberland Square. (c) 2gns. (e) July 13.

• • •

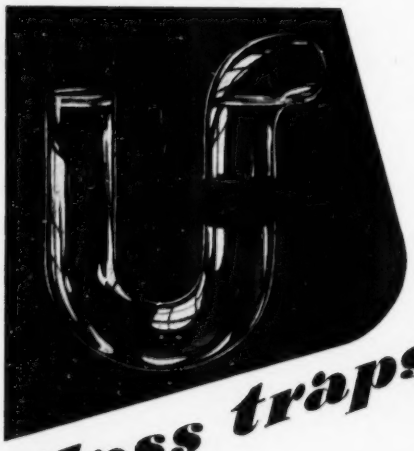
WALLINGFORD B.C. (a) 31 lock-up garages at Wallingford. (b) Borough Surveyor, Municipal Offices, High Street. (c) 2gns.

• • •

WALSALL B.C. (a) Block of 20 flats and a shop at St. Matthew's Close, Church Hill. (b) G. A. Jellicoe, 12, Gower Street, London, W.C.1. (c) 3gns. (e) July 13.

• • •

YORK C.C. (a) 8 aged persons' bungalows, Beck Lane, Heworth. (b) City Architect, 8, St. Leonard's Place. (c) £1. (e) July 11.



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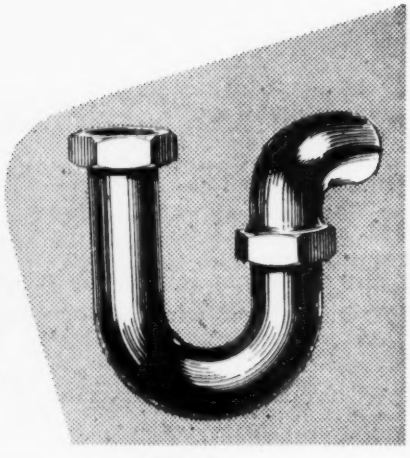

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Disposal Problems Solved Hygienically

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For office, factory and public cloakrooms, theatres, schools, etc., Southalls Cloakroom Incinerator is simple and inexpensive to install and unfailingly efficient. A gas flame, burning at intense heat for three minutes, destroys sanitary towels swiftly, conveniently and hygienically — economically, too. 5 incinerations cost 1d. and only the pilot flame burns between times.

* * *

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Height 24½" Width 8¼". Projection from wall 9¼". Finished in white vitreous enamel and chromium plating.

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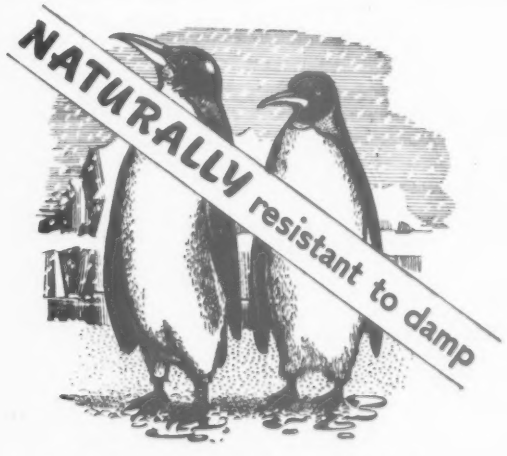

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THE following vacancies exist for ARCHITECTS:—

ADEN (CDE.112/2/03) P.W.D. Appointments will be pensionable on probation in the salary range £1,020-£1,350 p.a. gross, or on agreement in the range £1,224-£1,620 p.a. Commencing salary according to qualifications and experience. In addition a temporary allowance up to £240 p.a. is at present payable.

Free 1st Class passages for officer, wife and up to four children under the age of 18, with special arrangements for air passages for children during school holidays once each tour. Furnished quarters available at rental between £120 and £150 p.a. Leave at rate of seven days for each month of resident service after minimum tour of 18 months. Free medical attention for officer and family with reduced hospital charges. Income tax at low rates.

Candidates must be A.R.I.B.A. Duties will include design, and supervision of construction of public buildings and Government Housing Scheme, Town Planning development and control.

NIGERIA (CDE.110/14/011). ASSISTANT ARCHITECTS, Railways Department. Appointments are on contract in the salary range £895 to £1,719 p.a. gross, plus gratuity of £25 to £37 10s for each completed period of three months' service on satisfactory completion of contract. Commencing salary determined by war service and approved experience.

Free first class passages are provided once each way each tour for an officer and his wife, and an annual maintenance allowance or free passage allowance up to £75 each is payable in respect of a maximum of two children. Furnished quarters, if available, are provided at a rental charge of 10% of basic salary. Leave is granted at the rate of one week for each month of resident service after a tour of 18 to 24 months.

Candidates should be A.R.I.B.A. with several years' wide general experience.

NORTHERN RHODESIA (CDE.112/3/02) P.W.D. Appointments are on contract for three years in the salary scale £830-£1,410 p.a., plus gratuity of £25 to £37 10s for each three months' period of service, payable on satisfactory completion of contract. Commencing salary according to war service and experience. Cost of living allowance at present 24% of salary, subject to maximum of £316 16s, is also payable.

Free passages are provided for the officer, his wife, and children up to the cost of one adult fare. Leave at rate of five days for each month of resident service. Furnished Government quarters, if available, provided at a rental of not more than 10% of salary.

Candidates, between the ages of 32 and 45, must be A.R.I.B.A., with at least eight years' experience on the design, construction and supervision of large building schemes.

TRINIDAD (CDE.112/38/03). CHIEF ARCHITECT, Works and Hydraulics Department. Appointment is on contract for three years in first instance in the scale £1,200×£50—£1,300 p.a., plus gratuity of £37 10s for each completed three months' service on satisfactory termination of agreement. A varying cost of living allowance is also payable.

Free passages for the officer, wife and up to three children under the age of 18. Quarters are not provided, but allowance paid towards rent for private residence. Leave at the rate of 45 days a year.

Candidates must be A.R.I.B.A. or F.R.I.B.A. with at least 12 years' experience as a practising architect, or have held a responsible position in an architect's office for the same period. The selected officer will be responsible for the preparation of designs and all drawings for buildings and works and will be required to control and administer construction. He will also act as Liaison between the Department and Consulting Architects.

Colonial Office.
June, 1953. [7187

APPOINTMENTS—contd.

BOROUGH OF BASINGSTOKE.

ARCHITECT'S DEPARTMENT.
(Revised Advertisement)

APPLICATIONS are invited for the appointment of CLERK OF WORKS. Salary: Miscellaneous Grade V (£480—£540). Considerable experience of Housing and Road Construction is essential. Applications together with either copies of two recent testimonials or the names and addresses of two referees must be submitted not later than Monday, the 6th July, to the Borough Architect (E. Almond, Dipl. Arch. A.R.I.B.A.), Municipal Buildings, Basingstoke.

MEIRION O. JONES,
Town Clerk.
[7170

BOROUGH OF WILLESDEN.

APPOINTMENT OF
ARCHITECTURAL ASSISTANT.

APT. VI, salary £700-765 p.a.
inc. London weighting.

APPLICATIONS are invited for the above appointment on the permanent staff of the Borough Engineer and Surveyor from suitably experienced persons who are Associates of the Royal Institution of British Architects or who hold an equivalent qualification. The commencing salary will be fixed in accordance with the qualifications and experience of the successful candidate.

Full details and form of application can be obtained from the Borough Engineer and Surveyor, Town Hall, Dyne Road, Kilburn, N.W.6, and must be returned not later than 9 a.m. on Monday, 13th July.

(Sgd.) R. S. FORSTER,
Town Clerk.
15.6.53. [7174

URBAN DISTRICT OF FELTHAM.

ARCHITECTURAL ASSISTANT required in the Engineer and Surveyor's Department, Grade A.P.T.V. (Salary £625×£15×£15×£20—£675). Applicants must be Registered Architects.

Forms of application, obtainable from the undersigned, must be returned, accompanied by copies of two testimonials, not later than 9th July, 1953. Canvassing directly or indirectly will disqualify and applicants must disclose, in writing, whether to their knowledge they are related to any member of or the holder of any senior office under the Council.

M. W. COUPE,
Clerk of the Council.

Council Offices,
Feltham, Middlesex. [7179

CORPORATION OF LONDON.

APPOINTMENT OF ARCHITECTURAL ASSISTANTS.
AUXILIARY STAFF.

APPLICATIONS are invited for the appointment of an ASSISTANT within the range of the General Grade scale (£418×£20 to £586) including present cost-of-living addition, the commencing salary related to scale by age, minimum age 23 years, maximum salary at 30 years.

Applicants should have had good office experience and have passed or be preparing for Intermediate R.I.B.A. or R.I.C.S. Examinations.

The appointed officer will require to pass a medical examination and to contribute to the Corporation's Superannuation Fund as maintained under the City of London (Various Powers) Acts, 1931 and 1950.

Applications, giving full personal details, particulars of qualifications, experience, age, past and present appointments and the names of two persons to whom reference may be made, should be sent to the City Surveyor, Corporation of London, 55/61, Moorgate, E.C.2, not later than Saturday, 11th July, 1953. [7189

CONTRACTS

COUNTY BOROUGH OF BRIGHTON.

TENDERS are REINVITED for SECTIONS 5, 6 and 7 of the WOODINGDEAN ESTATE as one contract of 186 HOUSES.

Bills of Quantities and forms of tender may be obtained from the Borough Engineer & Surveyor, 26-30, Kings Road, Brighton, on or after 20th June, 1953, on receipt of a returnable deposit of £2 2s.

Tenders are to be delivered to the Town Clerk in plain sealed envelopes by 12 noon on Tuesday, 28th July, 1953.

J. G. DREW,
Town Clerk.
[7178

DODWORTH URBAN DISTRICT COUNCIL.

SOUTH ROAD SITE—NO. 2.

CONSTRUCTION OF 72 HOUSES.

THE Dodworth Council invite TENDERS from Building Contractors for the CONSTRUCTION of 72 HOUSES on the above Site. Roads are now in progress and building work should commence about the end of August.

Bills of Quantities may be obtained from the undersigned, the Architects to the Council, on payment of a deposit of £2 2s, which will be returned on receipt of a bona-fide Tender. Sealed Tenders, without any distinguishing mark, endorsed "Tender for Houses—South Road Site," are to be forwarded to the Clerk to the Council, Council Offices, Dodworth, not later than First Post on MONDAY, July 20th, 1953.

The Council do not bind themselves to accept the lowest or any Tender.

HOWARD AND BENSON, F./F.R.I.B.A.,
Chartered Architects.
88, Mosley Street,
Manchester, 2. [7182

MISCELLANEOUS SECTION

RATE: 1/6d. per line, minimum 3/-, average line 6 words. Each paragraph charged separately.
BOX NOS. add 2 words plus 1/- for registration and forwarding replies which should be addressed c/o. "The Architect & Building News," Dorset House, Stamford Street, London, S.E.1.
PRESS DAY Monday. Remittances payable to Iliffe & Sons Ltd., Dorset House, Stamford Street, London, S.E.1.
No responsibility accepted for errors.

ARCHITECTURAL APPOINTMENTS VACANT

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc., if the applicant is a man aged 18-64 or a woman aged 18-59 inclusive, unless he or she or the employer is excepted from the provisions of The Notification of Vacancies Order 1952.

QUALIFIED senior architectural assistant required at once, able to take charge of industrial contracts.—Apply in writing Ramsey, Murray & White, 32, Wigmore Street, W.1. [7180

ARCHITECTURAL Assistants required in large London private office for varied work. Intermediate standard and Higher. Apply in writing stating experience, age and salary required—Box 8172. [7190

ARCHITECT'S assistant required for varied work, Intermediate standard or higher and at least two years' office experience; apply in writing stating age, etc., and salary required.—Cordingley & McIntyre, Chartered Architects, The College, Durham. [7171

SITUATIONS VACANT

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc., if the applicant is a man aged 18-64 or a woman aged 18-59 inclusive, unless he or she or the employer is excepted from the provisions of The Notification of Vacancies Order 1952.

WANTED urgently, full-time secretary/shorthand-typist for Architect's pleasant office in St. John's Wood.—Box 8171. [7186

SANITARY and heating engineering assistant required for design work. Salary according to experience.—Apply in writing to T. P. Bennett & Son, 43, Bloomsbury Square, London, W.1. [7184

MATERIALS Taker-off required by the Kuwait Oil Company for service in Kuwait. In addition to formal training must have at least 4 years' experience in a building or contractor's office on the preparation of lists of materials required for building or civil engineering structures. Should be able to take off from drawings complete and accurate lists of all materials required. Additional experience in taking off lists of electrical materials and preparation of detailed orders an advantage. Age 30-40. Salary starting £790 p.a. clear, plus generous allowances. Pension Scheme and kit allowance. Write for application form giving personal details and quoting K.1733 to—Box A/13, c/o 191, Gresham House, E.C.2. [7188

SERVICES OFFERED

MODERN Structural Engineer wishes to co-operate with architects.—Please write, Box 8173. [7191

SERVICES OFFERED—contd.

THATCHING and reedlaying contracts undertaken by experts.—J. G. Cowell, Soham, Ely, Cambs. [0122

MUNICIPAL Hire Service. To remind you of the service we give to the public through their local authorities: Cesspool Emptiers, Gully Emptiers, Dust Freighters and Road Sweepers. With or without Drivers, at your service.—E. H. Lee, Ltd., New Rd., Woodston, Peterborough. [0132

FOR SALE

ALL Mouldings, Plain and Embossed, and Embossed ornaments. Numerous designs.—Dareve's Moulding Mills, Ltd., 60, Pownall Rd., Dalston, E.8. [0086

STEEL gutters and ironwork; keen prices and delivery.—E. Stephens & Son, Ltd., Bath Street, E.C.1. [7161

NEW Tubular Steel Scaffolding, in random lengths, for immediate delivery, from 1/3 ft. New fittings also available if required.—H. W. Bewley, Ltd., 90, Archway Rd., London, N.19. Tel. Archway 4471. [7185

PLANT FOR SALE

ONE used Norton & Gregory Ferazo blue print developing apparatus, 40in. for operation 230v A.C., good condition.—Landis & Gyr, Ltd., Victoria Road, N. Acton, W.3. [7183

CONTRACTS WANTED

SPECIAL TO ARCHITECTS

BUILDER desires to enter into small Contracts with limited number of Architects (London area), first call on all services, consultations, specifications and estimates free of all obligation.—W. French, 32, Maitland Park Road, N.W.3. Gul. 1347. [7151

ELECTRICAL contractors desire to enter into small contracts with limited number of architects (London Area), first call on all services; estimates free.—Reissner & Goldberg, 68, Canterbury Rd., N.W.6. Mai. 9503. [7181

NISSEN HUTS, ETC.

RECONDITIONED ex-Army huts and manufactured buildings, timber, asbestos, Nissen type, hall type, etc., all sizes and prices.—Write, call or telephone Universal Supplies (Belvedere), Ltd., Dept. 32, Crabtree Manorway, Belvedere, Kent. Tel. Erith 2948. [0120

WANTED

BRICKWORK and Pointing wanted. Own plant if required.—Shaw & Tennant, 121, Leander Rd., S.W.2. Tul. 7409. [7141

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"WATCH IT COME DOWN."
By SYD BISHOP & SONS,
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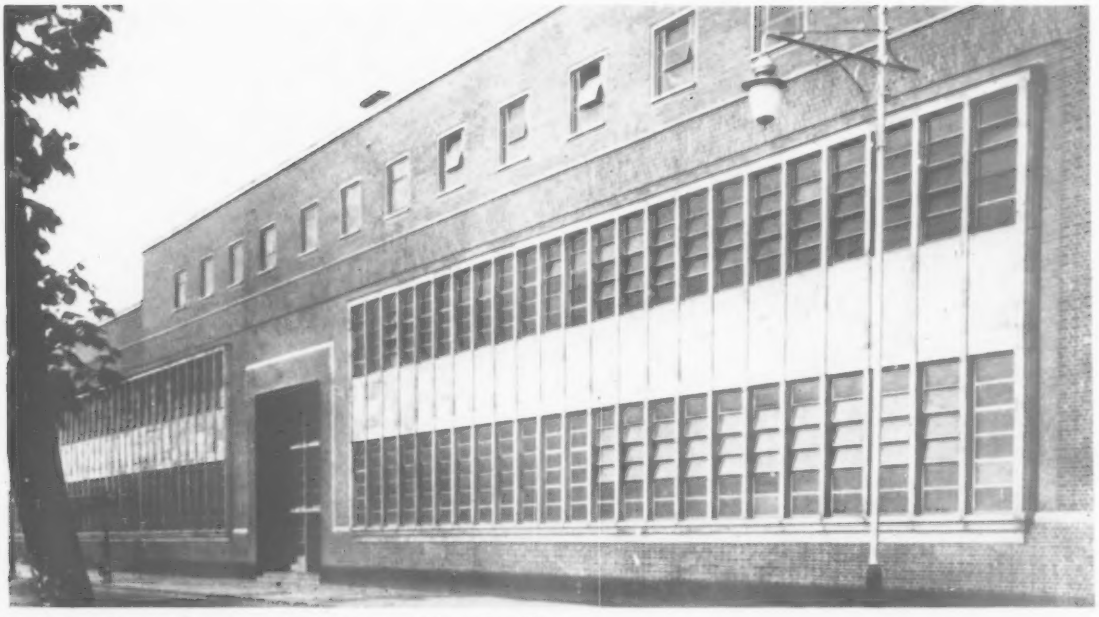

South-west elevation, featuring artificial stone panelling and mullions

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Main hall and works canteen, showing service counter. The floor is of Rhodesian teak

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